

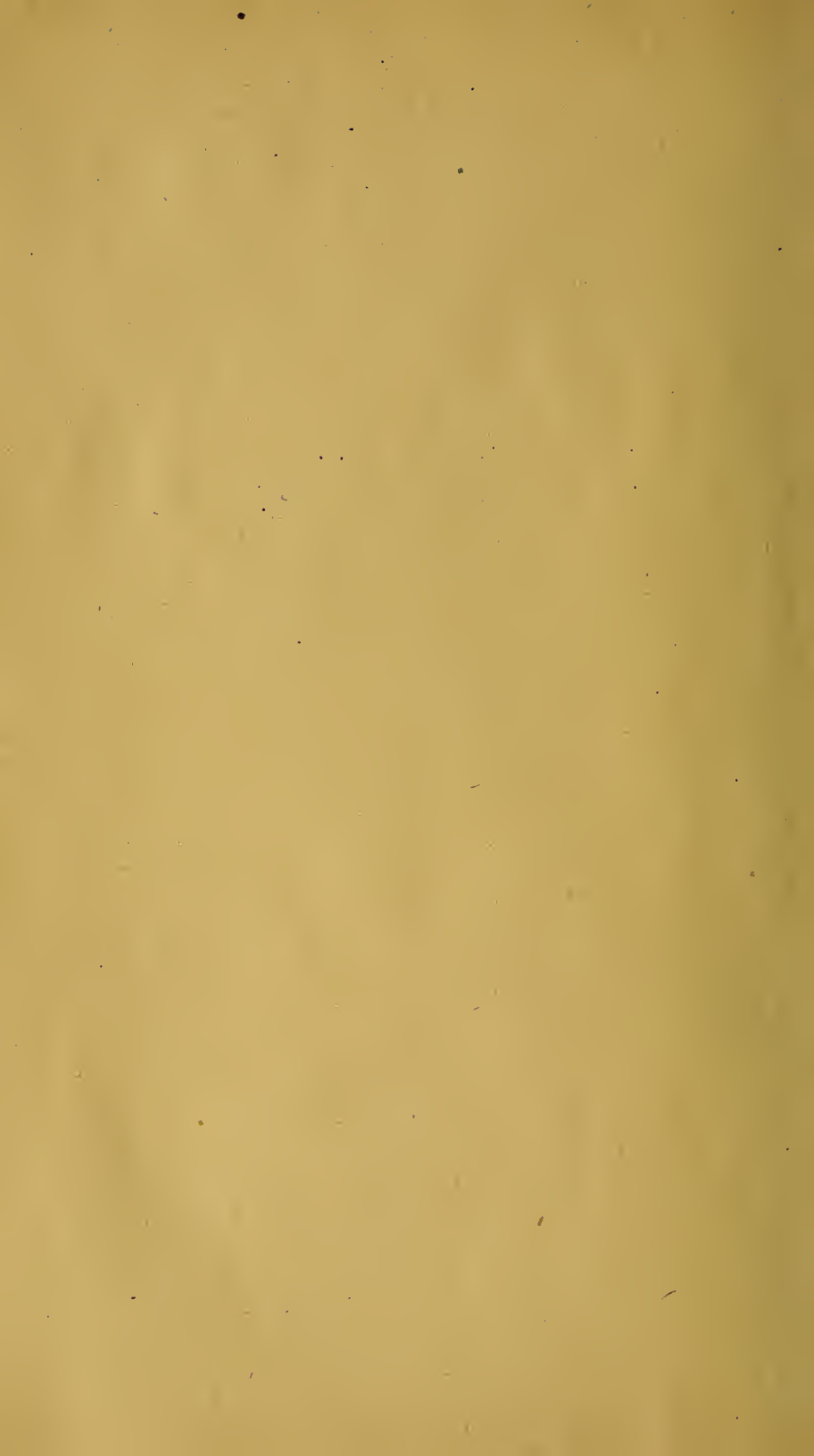
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WAR DEPARTMENT : BUREAU OF INSULAR AFFAIRS

SPECIAL REPORT OF  
**FRANK McINTYRE**

BRIGADIER GENERAL, U. S. ARMY  
CHIEF, BUREAU OF INSULAR AFFAIRS

TO

30496-78

THE SECRETARY OF WAR

ON THE

**PHILIPPINE ISLANDS**



PHILIPPINE ISLANDS





# THE GOVERNMENT OF THE PHILIPPINE ISLANDS

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## MESSAGE FROM THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

A LETTER FROM THE SECRETARY OF WAR SUBMIT-  
TING A REPORT OF BRIG. GEN. FRANK McINTYRE,  
CHIEF OF THE BUREAU OF INSULAR AFFAIRS, UPON  
HIS RECENT TRIP TO THE PHILIPPINE ISLANDS



JANUARY 12, 1916.—Read; referred to the Committee on the Philippines  
and ordered to be printed

WASHINGTON  
GOVERNMENT PRINTING OFFICE

1916  
✓

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Dec 10 1919



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## MESSAGE OF TRANSMITTAL.

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*To the Senate and House of Representatives:*

I transmit herewith the report of Brig. Gen. Frank McIntyre, Chief of the Bureau of Insular Affairs, upon his recent trip to the Philippine Islands.

Inasmuch as the bill extending a greater measure of self-government to the Filipinos is now pending in Congress, it is recommended that this report be printed as a congressional document.

WOODROW WILSON.

The WHITE HOUSE,  
*January 12, 1916.*

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## LETTER OF SUBMITTAL.

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WAR DEPARTMENT,  
*Washington, January 10, 1916.*

Mr. PRESIDENT:

In my last annual report I mentioned that Gen. Frank McIntyre, Chief of the Bureau of Insular Affairs, had just returned from an extended trip to the Philippine Islands, and that his report containing a recital of facts and actual conditions there would be shortly transmitted. The report I now submit herewith in duplicate, with the suggestion, inasmuch as the Philippine bill has been reported by the Senate Committee on the Philippines and is now the subject of debate in the Senate, that it be transmitted to Congress, with the recommendation that it be printed as a public document.

Draft of message of transmittal, in duplicate, for your signature, if you concur in this recommendation, is also submitted herewith.

Very sincerely,

LINDLEY M. GARRISON,  
*Secretary of War.*



SPECIAL REPORT OF BRIG. GEN. FRANK McINTYRE,  
UNITED STATES ARMY. ON THE PHIL-  
IPPINE ISLANDS.

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WAR DEPARTMENT,  
BUREAU OF INSULAR AFFAIRS,  
*Washington, December 1, 1915.*

SIR: In compliance with your instructions, I sailed from San Francisco on July 3, last, to visit the Philippine Islands, and returning arrived in Washington on October 22, last.

I was in the Philippine Islands from July 30 to September 9, 1915. My itinerary in the islands is attached, marked "Appendix A."

I made every effort in Manila and at other points visited by me to ascertain the actual conditions of the Philippine government and of the Philippine people, and of the attitude of the people toward the government. I gave persons desiring to see me every opportunity to do so, and I am not aware that anyone who desired to see me was unable to do so.

I conversed freely with persons of every shade of opinion in the islands—Americans, Filipinos, and foreigners—and found that the people of the islands were well satisfied with the government, and there was every indication that the satisfaction was greater than it had been at any time in the past.

**LAW AND ORDER.**

There was no disorder in any part of the islands.

There was in those parts of the islands inhabited by the Moros a far better condition than could have been anticipated a few years ago by the most sanguine. The relation between the departmental government and the Moros was as close as the nature of the country inhabited by them permitted. The principal Moro chieftains within reach of the points visited by me came to see me and gave every indication of satisfaction with conditions existing in their territory. The peaceful conditions which have existed for a number of years among the wild people of Luzon have been continued, and these people are steadily progressing toward civilization.

**THE PHILIPPINE CONSTABULARY.**

It is impossible to omit from consideration in any reference to law and order the Philippine Constabulary. This consists at present of 316 officers and 4,864 men. The officers are in part Americans and in part Filipinos, the number of Filipinos being gradually increased.

The present condition of the constabulary is well described by Secretary Dickinson in the report which he made after his visit in 1910, which I quote as follows:

This is a useful and effective body of men now consisting of 322 officers and 4,451 enlisted men operating from 138 stations. The commissioned officers are generally Americans, but a number of Filipinos are also officers, and the policy is to fill vacancies by their appointment as rapidly as they meet the requirements. They are maintained much more cheaply than our American soldiers or Philippine Scouts. Their pay is less, their outfit more economical, and they subsist upon the country, thus saving the enormous cost of transportation incident to supplying the army.

Besides serving as a military force to keep order and suppress insurrection, they are very efficient as auxiliaries in sanitary work, especially during epidemics. Although they do not receive the same amount of training and military discipline which the scouts do, yet they are, looking especially to their availability for sanitary work, of greater utility than the scouts. \* \* \*

In your report to the President (Secretary Taft's report of 1908) you stated that when you were in the islands the native papers condemned the constabulary, but that during the two following years a change had taken place, and that nothing was more popular in the islands than the constabulary. I am happy to say that this popularity is unabated, and that the constabulary and its administration are well entrenched in the respect and confidence of the people. The men and the native noncommissioned officers take great pride in their organization. They are well set up, efficient, keen in their work, and would be an effective force in case of foreign invasion. They conciliate constantly the people toward the administration, are learning the English language and habits, and thus are the medium of wholesome influences upon their people.

Every word of commendation of this body in the foregoing is applicable to-day.

Although the constabulary is practically of the same strength as on Secretary Dickinson's visit in 1910, the improved condition in law and order is such as to enable this body to accomplish now the work in which it was at that time assisted by the use of Philippine Scouts. At present no Philippine Scouts are used to assist the constabulary in the maintenance of order.

In the annual appropriation act for the fiscal year 1908 the Philippine Commission included a provision by which the officers of the Army made available as chief and assistant chiefs of the constabulary might, as vacancies occurred, be replaced by civilians.

This has been continued in the law; it is unwise and should be repealed.

The maintenance of the high standards of the constabulary requires at least the full number of Army officers authorized.

This is said with a full appreciation of the excellent work of the constabulary officers. I know nowhere of men doing better or more efficient work than the young officers of the constabulary.

The municipal police in the islands are highly creditable bodies. I saw nothing that impressed me more than the truly wonderful improvement in the bearing and appearance of the police of the several municipalities.

It is only fair to say, in recognition of the excellent work of the several administrations in the islands, that the maintenance of law and order therein does not now require the presence of a single American soldier, and that the duty of such soldiers in the Philippine Islands is to-day in all respects identical with their duty in the United States in time of peace.

## EDUCATION.

In so far as practicable, I visited the public and private schools. The school buildings were, in general, of durable material, well suited to their purposes and to the climate, and while there was a general feeling among the people that there was still a lack of room in the schools for the pupils who might attend, I became convinced that the present attendance can not be increased without an expenditure of money in excess of the resources of the islands, and that the school system can not be extended, even though the money were available, without calling in a large number of teachers from the United States. In other words, it appeared that the supply of suitable teachers in the Philippines was wholly in use in the schools as they are at present conducted and that any effort to increase the number of schools and teachers without obtaining a supply of teachers from the outside would result in the employment of persons as teachers who would be probably more harmful than beneficial.

The zeal for education that has been so often remarked by visitors to the Philippines is unabated. The willingness of the people of the islands to expend their money for schools is still marked.

There has been satisfactory progress in the schools, both in the number of buildings and teachers and in the number of pupils attending, but a material increase in the number of schools or the number of pupils would only be justified in case the number of teachers from the United States could be correspondingly increased.

I am convinced that any effort to economize in the number of competent American teachers is a mistake and that steady progress demands that the number of American teachers be not decreased from the maximum of the past five years.

This would not mean failure to employ such Filipino teachers as become available. A fair measure of progress would mean the employment of all available competent Filipino teachers.

## THE ENGLISH LANGUAGE.

One of the difficult questions to answer definitely is that as to the progress of the English language among the people of the islands.

That the progress is great and that the English language is to-day more generally understood in the islands than any language in which there exists a general literature or in which any large part of the business of the world is conducted is undoubted. It would appear that the English language is more generally understood throughout the archipelago than the Spanish language. It is also true that a traveler in the islands can, with a knowledge of the English language only, communicate with people in all parts of the archipelago much more readily than can a native Filipino who speaks only his native dialect, and relatively few Filipinos have ever been able to speak a native dialect other than their own.

The doubtful point is as to the thousands of children who after a few years quit the schools to live and labor in households where the elders speak only the native dialect. Do they retain their English and progress in it, or do they gradually lose the little English they have acquired at the schools? I received quite positive answers

to this question; they were not all alike, but the weight of opinion was favorable to progress. That there could remain among the observant with opportunities to judge an element of doubt indicates the necessity of action which would remove this question from the field of uncertainty. The immense majority of the children are of this class and if the result of teaching them English is simply to enable them with some personal effort to become literates in their native dialect there is a great waste of effort.

There is still discussed from time to time among intelligent persons interested in education the question whether it would not be better in the first two or three grades of the public schools to teach in the native dialect. One view is that in this way a child going to school would acquire more information in two or three years than where, as at present, a considerable part of his time is taken up in acquiring a foreign language.

The answer to this seems to be that while a child could accumulate more concrete information, the concrete information acquired by a child in two or three years at school is of itself of little value, and that what is of value is that the child acquires instruments which may lead to further knowledge if intelligently used. The native languages do not possess the literature which would be of use to a child in enlarging his knowledge of the world; thus the benefit gained in two or three years study in a native dialect would be limited to the concrete information thus acquired, as the child would be without possession of those tools which would open up other sources of information.

It would seem, therefore, to be the part of wisdom to continue, as at present, making English the language of instruction, thus giving the child a knowledge of a language which will enable him to continue acquiring knowledge from written books, even after leaving school.

The bureau of education now issues a number of publications. It is thought that none of these have the educational value that might be given to a weekly leaflet of "Current Events" published in plain, simple English distributed freely throughout the islands. This would stimulate the continued interest in English in those who have left the schools, and would, if intelligently edited, be of wide educational value.

If not too manifestly for that purpose, it might be of great assistance to the government in many fields.

#### FILIPINIZATION OF THE PUBLIC SERVICE.

In his special report to President Taft, made in 1910, Secretary Dickinson said:

In your special report of 1908, under the heading "Civil service," you say:

"Still in many of the bureaus the progress of Filipinos to the most responsible places is necessarily slow, and the proportion of them to be found in positions of high salaries is not as large as it ought to be in the near future. The winnowing-out process, however, is steadily reducing the American employees in the civil service."

One of the demands most urgently brought to my attention was that the work of increasing the proportion of the Filipino employees is not being pressed, and that, especially in the higher salaries, there is discrimination against Filipino employees. The Filipinos bear the burden of government, and should, so far as



is consistent with proper administration and the maintenance of the present attitude of the United States in the government of the islands, be given a preference in employment.

\* \* \* \* \*

The general question was taken up with the Governor General and the heads of departments and bureaus. It is the fixed policy of the administration to proceed as rapidly as the good of the service will permit in increasing the Filipino employees, and I am satisfied that there will be a hearty cooperation upon the part of all. The Governor General has always favored this course. \* \* \*

I append as a part of my report a table, marked "Appendix G," showing, for the several years set out, the number of Americans and Filipinos employed in the various services therein mentioned.

Without a careful analysis of these tables one might get a false impression of the extent to which the government of the islands has been Filipinized during the period covered by them. They show the increase of Filipinos in the civil service of the islands, but it should be observed that in the period covered by these tables the number of Filipino members of the commission has been increased 33½ per cent, the number of judges of first instance by 100 per cent, and there has been created the Philippine Assembly, an elective body composed exclusively of Filipinos.

To-day four of the nine members of the Philippine Commission, which constitutes the upper house of the legislature, are Filipinos. The entire lower house is composed of Filipinos. In the executive departments the important portfolio of finance and justice is held by a Filipino. Three of the seven justices of the supreme court, including the chief justice thereof, are Filipinos, and 10 of the 20 judges of first instance are Filipinos, while practically all the lower judicial officers are Filipinos.

The policy in this regard, as set forth in the report of Mr. Taft in 1908 and of Mr. Dickinson in 1910, and which has been outlined in practically every official statement on this subject since the establishment of civil government in the Philippine Islands, has been steadily adhered to by the present Governor General. The change in the subordinate positions has been somewhat more rapid than it has averaged in the recent past. It has, however, been by no means radical. Filipinization has been marked by necessary conservatism in the higher positions in the government.

To illustrate this, the last paragraph in Secretary Dickinson's report of 1910 would read, if written to-day, as follows:

To-day 5 of the 9 members of the Philippine Commission, which constitute the upper house of the legislature, are Filipinos. The entire lower house is composed of Filipinos. In the executive departments the important portfolio of finance and justice is held by a Filipino. Three of the 7 justices of the supreme court, including the chief justice thereof, are Filipinos, and 22 of the 36 judges of first instance are Filipinos, while practically all the lower judicial officers are Filipinos.

The only change from 1910 is that 5 instead of 4 of the 9 members of the Philippine Commission are now Filipinos, the changes in the number of judges of first instance being the result of an increasing number of judges of first instance, as it will be noted that the number of American judges is greater than in 1910.

There has been one feature of Filipinization that is unfortunate. It seems to have been accepted that once a Filipino has filled an office it would be a step backward thereafter to appoint an American to that position. This is unwise. The conditions required in an office change with progress. Circumstances that make the appointment of a Filipino to a position advisable may change. The appointment of an American under these circumstances would not be an admission of error. However, if error has been made in this regard, it should

be corrected. It would be particularly fortunate if this unwritten law could be departed from by this insular administration, which has in so marked a degree the confidence of the Filipino people that it could make such a change without arousing a feeling that it was a backward step.

Certain other features of Filipinization are referred to under the head, "The civil service."

#### THE CIVIL SERVICE.

From its organization the Philippine government has striven to establish an efficient civil service based upon merit. The progress of the service from its origin is well and fully set forth in the annual reports of the bureau of civil service.

I found the civil service of the government efficient and the civil-service law and regulations being strictly enforced. I found, however, among the American employees in the civil service a degree of unrest, to explain which requires a review of certain conditions affecting Americans in that service.

In organizing the central government it was at first difficult to utilize a large number of Filipinos, for the reason that they were lacking in knowledge of American methods of administration and were ignorant of the English language. Salaries were fixed having in mind, not the employment of Filipinos living at their homes, but Americans who, in most instances, had to be brought from the United States or who contemplated returning to the United States. This necessarily made an expensive civil service in a country that could ill afford it.

Unfortunately, in fixing the salaries of government officers the commission failed to recognize the difference between Americans and Filipinos, and such Filipinos as were appointed to the more responsible positions under the government—and many were so appointed even in the early days—were given salaries altogether out of proportion to what they would command in nongovernmental occupations. It is probable that this was done, in the first instance, in a desire to attract the good will of Filipinos toward the government. It was early recognized as an error, but it is an error of the kind that is difficult to correct.

It was the announced policy of the commission to replace Americans in the Philippine civil service by Filipinos as rapidly as Filipinos competent to take the places could be developed. During this process it became apparent that if the schedule of salaries was to continue as established for American employees, when the service should be Filipinized the government of the Philippine Islands would be the most extravagant in the world. This fact was pointed out in so many words by Governor General Smith in 1907.

The correction of the difficulty was, in part, left to the judgment of bureau chiefs, and in certain cases it was corrected to the limit of their authority; that is, in the lower clerical positions. As American employees left such positions Filipinos undertaking the work were, in some cases, placed in a lower grade. While this still resulted in giving the Filipino a larger salary than his service would command in the open market, it had, when done, the effect of bringing about a slight reduction of expense.

This method of correcting the evil administratively exposed the bureau chief to the criticism that he was hostile to Filipinos in that he was adopting a policy toward them not sanctioned by legislative recognition of the widely different conditions affecting Americans and Filipinos in the Philippines. The bureau chief found also that replacing an American by a Filipino did not bring with it the reasonable economy that it should, while it generally brought increased labor in supervision or decreased efficiency or both.

The net result was neither fair progress in Filipinization nor economy. On the other hand, there was with governmental development normally an increase in expenditures for salaries which outran the increase in revenues.

In 1905, when the cost of the civil service of the government had become excessive, a board was convened to make recommendations looking to economy and efficiency, and, as a result of the report of this board, the number of employees in the civil service was reduced from 3,307 Americans and 4,023 Filipinos on January 1, 1905, to 2,616 Americans and 3,902 Filipinos on January 1, 1907.

With reference to the effect of this on the American personnel, the director of civil service in his report for 1906 said:

It must be stated with regret that there has been no change in the tendency for the best qualified employees to resign after from two to five years of service. The method that was adopted in reorganizing the Government service and reducing the force has tended to instability in the service. Because of the impossibility of ascertaining until the appropriation act had passed the reductions that would be made in the force, in some bureaus new appointments were made up to the date of the reorganization, when employees of other bureaus that might have been transferred to the vacancies were dropped "on account of reduction of force." It is possible that many of the persons so dropped were, in fact, more or less inefficient. However, "reduction of force" was the reason given for the removals, and as a result there is at present a feeling of uncertainty among many efficient employees as to their tenure of office.

In 1913 the conditions which had required the calling of the board in 1905 had again arisen; once more the cost of this service was beyond the resources of the Government. There had been the natural growth of the civil service, the natural resistance of bureau chiefs to dispense with the services of faithful Americans in subordinate positions, and the natural tendency to replace efficient Americans on leaving by Americans, in part due to the fact that the replacing of an American by an untried and less efficient Filipino brought with it practically no resulting economy.

It was contemplated to meet this condition as it was met in 1905. A board was ordered to make recommendations which would bring about economy. (Copy of order attached, marked "Appendix D.") Pending the report of this board such economies as could be effected without changes in the law were made.

This was the condition of affairs when Gov. Gen. Harrison succeeded Gov. Gen. Forbes, and the legislature convened in 1913.

The report of the 1905 board had to be considered by the commission only, and most of the reforms recommended by it were adopted.

In 1913 the legislature consisted not only of the commission but of the assembly, and the legislature, with the concurrence and support of the Governor General, undertook to bring about those reforms

which it deemed necessary to bring the cost of the civil service of the Government within its resources. In so far as it affected the American personnel the legislature took the identical action taken by the commission in 1905.

As a result of the appropriation bill of 1913-14 and executive action, the number of Americans in the service was reduced from 2,623 on January 1, 1913, to 1,978 on December 31, 1914, while the number of bureaus was reduced from 25 to 22.

While the reduction in the total of Americans employed from 1913 to 1915 was approximately the same as in 1905-1907 the number leaving the service from 1913 to 1915 was far less, as fewer Americans were given original appointments between 1913 and 1915.

I noted on my visit in 1915 the same "feeling of uncertainty among many efficient employees as to their tenure of office" reported by the director of civil service in 1906.

It is thus noted that similar conditions in two cases brought about similar results. In my opinion in both cases the same errors were committed. first, in providing for reduction of salaries in positions that required the services of highly efficient Americans; second, in not openly making a proper difference in salaries between residents of the Philippine Islands and residents of the United States holding similar positions; and, third, in not making it equally clear that while for some time it would be necessary to fill certain subordinate places with Americans, it was rather desirable than otherwise that these positions should be vacated at the end of contractual periods.

It is in recognition of the hardship of the present situation on American officials and employees of the Philippine Government that I earnestly recommend or renew the recommendation made in 1907 for the passage by the Philippine Legislature of the appended bill for retirement of certain employees of the Philippine Government.

It will be noted that the benefits of the bill are extended only to those employees or officials who receive an annual salary of \$3,000 or more. This would indicate the view of the government on the question of permanency of employment and would be a notice to nonresident employees receiving less salary and who were not in line to be promoted to positions carrying a higher salary than \$3,000 that their service with the Philippine government was on a contractual basis, and that their permanency in that service was not regarded as being to the interest of the government; while, on the other hand, its provisions should be attractive to those Americans whom it was desired to retain more or less permanently in the service. This would remove the constant feeling of uncertainty existing among American employees and which is emphasized at such times as retrenchment or efforts at reform bring about more than the usual number of changes in the personnel. This unrest among American employees of the government has been constant since the establishment of American government in the Philippines. For the 10 years ending June 30, 1913, the average annual number of Americans leaving the service was 646. For the two years since, ending June 30, 1915, the average annual number was 569. The number of Americans newly appointed in the service during the last two years was far less than in any similar previous period.

It has been sometimes said with apparent reason that the salaries fixed for Americans employed in the Philippine civil service were too

high. Experience with the service does not show that this was the case, as the service was continually losing its best American employees by their voluntary withdrawal from the Islands. The director of civil service, in his report for 1907, commenting on this, said:

It is a matter of regret to report that the percentage of withdrawals from the service of competent and desirable men has been greater during the past year or two than theretofore, while there have been fewer separations of the incompetent and undesirable. On January 1, 1907, there were 2,616 Americans having regular appointment in the service. During the fiscal year ended June 30, 1907, approximately 500 Americans resigned, about double the number withdrawing from the service during the preceding fiscal year. Of the 500 over 100 were university or college graduates, including scientists, civil engineers, surveyors, physicians, teachers, and subordinate officials, as against 40 university or college graduates for the preceding year. Of the remaining 400 a considerable number were graduates of high or normal schools. The loss to the Government of these trained and experienced men is in many instances irreparable. Good men were evidently discouraged, and apparently lost hope that the Philippine, public service promised a career which would justify their remaining in it.

To those who have studied the subject for a number of years it is clear that the salaries paid to American employees in the Philippine Islands were low, and that, while the number of Americans could have been materially reduced, particularly in subordinate positions, those retained should be given increased rather than decreased salaries. The difficulty has been that Filipinos, both in high and in low positions in the Philippine government, have been given salaries altogether too high.

Many instances could be cited in which bright young Filipinos were attracted to the minor governmental positions not only from the professions but from commerce and particularly from agriculture. It is a distinct impediment to the progress of the islands that such is the case.

Statements loosely made that politics had been injected into the Philippine civil service are wholly baseless. It could with equal or perhaps greater accuracy be said that politics had been recently uprooted from the Philippine civil service, as among those leaving that service recently were persons more actively and more prominently in politics than those entering.

The fact is, however, that the Philippine civil service is and has always been practically untouched by politics. Allegations that politics had entered the Philippine civil service are equally untrue whether referring to the last two years or to prior periods.

#### SANITATION.

The great work of sanitation in the islands, which has been so commended by visitors in the past, has been steadily advanced. Health conditions in the islands continue to be much better than in any of the neighboring oriental countries.

During my visit cholera was reported at several points. The work of suppression was promptly undertaken, and under such well-organized system that there was no excitement or panic, but a feeling of confidence that it would soon disappear.

The last few years have been marked by a notable extension of sanitary work among the Moros and pagans.

The improvement of the water supply by the boring of artesian wells has been continued, and the number of such wells is being steadily increased. During my visit a well-boring outfit was just beginning an artesian well at the settlement of the Datu Piang up the Cotabato River in Mindanao, which illustrates to what remote points this work has extended.

The following municipalities have water systems: Manila, Cebu, Vigan, Zamboanga, Siquijor, Mambajao, Boac, Coron, Tagbilaran, Sariaya, Jolo, and Romblon.

The initial work on a much-needed improved system at Zamboanga was under way during my visit.

I was present at the inauguration of the new system at Vigan.

#### AGRICULTURE.

It is apparent that the progress of agriculture in the islands has not kept pace with progress in other directions, notably in the public improvements, education, and sanitation. The beautiful highways that have been built at large expense and which require annually a considerable amount for their maintenance have not been accompanied by the development in agriculture and the consequent traffic over the highways which ordinarily accompanies such construction. It would be difficult, if not impossible, to justify the beautiful roads in the Philippine Islands on economic grounds alone. If their construction is justified, it must be, for the present, on the ground of educational benefits and usefulness in the maintenance of law and order.

Agriculture being the principal and almost exclusive source of wealth of the people, its backwardness requires more than a passing word.

It is due in the first place to the extreme depression resulting from years of war and insurrection prior to the establishment of our Government in the islands, and to the conservative nature of the people; and, in the second, to the fact that the government had not interested itself in agriculture in the intensive way that it had taken up education and sanitation.

Recently the government has displayed greater activity in this direction, and there seems at present to be a more widespread interest in the development of agriculture. During my visit there was held in Manila a congress of agriculturists. There were nearly 600 delegates in attendance, representing practically all sections of the archipelago and every phase of agriculture.

This was the first congress of the kind in the history of the islands. The opinion was general that much good would come therefrom. Following, as it did, the organization of insular municipal and provincial agricultural societies throughout the islands under the stimulus of the bureau of agriculture, it betokens awakening interest in the power of cooperation.

Within the past two years the legislature has passed important acts for the special benefit of agriculture in the islands; notably, an act providing for inspection, grading and baling of manila hemp; and a sugar central act, providing government aid in the establishment of sugar centrals.

It is customary in discussing the backwardness of agriculture to lay great stress on the loss of work animals by rinderpest and on the frequent destruction of crops by locusts. I have no desire to minimize these plagues, yet I am confident that to a great extent the actual loss from these causes is largely due to the unsatisfactory condition of agricultural labor.

The same activity and cooperation of farm labor essential to any form of successful agriculture would practically nullify the ravages of these pests. Without such activity and cooperation, even in the absence of the pests, agricultural progress would lag.

The eradication of rinderpest has probably required a greater expenditure of money than all other work of the bureau of agriculture combined.

In order to show fully the effort made, the false hopes of success raised only to be disappointed, and how groundless is the complaint that recent changes in methods of handling the disease were threatening disaster, I append quotations from the annual reports of the commission from 1905 to 1913, inclusive, on this subject.

The abundance of carabao in the fields now makes it no longer possible to ascribe agricultural depression to disease of work animals.

The locusts are still bad. It would seem that they would, unless destroyed by natural causes, continue so until more general cultivation destroys their breeding places. Meantime, intelligent cooperation in fighting them would greatly reduce their ravages.

I saw locusts in considerable number in six widely separated places on my visit. There was widespread commendation of the work being directed personally by the assistant director of agriculture in combatting them.

I append extracts from the reports of the Governor General for 1912 and 1913, from which it will be seen that the locust conditions are unfortunately normal.

#### AGRICULTURAL COLONIES.

I visited the American colony at Momungan. It is situated on the road between Camps Overton and Keithley in Mindanao at a distance of about 6 miles from Camp Overton and at an elevation of about 1,300 feet above the sea. While the road is a mountain road, auto trucks make the trip from Overton, on the seacoast, to Momungan in about 50 minutes.

I found there 56 Americans with Filipino families—52 white men and 4 negroes. The colony is in a district inhabited by peaceful Moros engaged in agriculture, who may be employed as laborers, as the colonists are in position to use additional labor. The land selected for the colonists is in a beautiful rolling country traversed by the River Agus, as well as by the highway joining Overton and Keithley.

At the time of my visit the colonists had been established in their homes about one year, and the result of one year's work was remarkable. They had an average of about 16 acres of land per family in cultivation. They were harvesting corn, beans, sweet potatoes, and peanuts, and they had no difficulty in finding markets for these. The houses of the colonists were comfortable and suitable to the climate, and were notably better than those of Filipinos of the

tenant class throughout the archipelago. There was no indication of dissatisfaction among the colonists, and if they continue to be satisfied there seems no reason why the experiment should not be a success.

There is considerable travel along the road traversing the colony, so that the colony is not isolated. The colony receives the sympathetic attention of the governor of the Province, Col. Gilsheuser, of the constabulary, and is assisted in so far as possible by the commanding officers of the two scout posts at Overton and Keithley. It is probable that no better site could have been selected in the Philippine Islands for this very interesting experiment.

The inception of this colony is not without interest. In February, 1913, the Philippine Legislature appropriated a fund of 400,000 pesos, known as the "Rice colonization and plantation fund," to be used for the establishment and operation of colonies and plantations on public lands, and by executive order No. 29, March 10, 1913, Gov. Forbes appointed a committee of three to carry the provisions of that act into effect. It seems that this act had contemplated the locating of Filipino families, taken from those districts where there was a congestion of population, in districts where there was a lack of population and an abundance of land suitable to rice and other cereals.

Later, however, owing to the enforcement in the Philippine Islands of the act of Congress of August 24, 1912, providing for the discharge of civilian employees of the Quartermaster's Corps and their replacement by an enlisted personnel, many men who had been for a long time in the islands as Army employees and who were unwilling to enlist under the provisions of this act were discharged. At the same time, owing to necessary retrenchment, a number of men who had similarly been for years in the employ of the government of the Philippine Islands were discharged. These men were given opportunities to return to the States, and were, in general, treated liberally in the matter of final payments on discharge, but there were among them a number of men who had married Filipino women and who were unwilling to leave their wives and families, and who, believing that such families would be unhappy under conditions in the United States, elected to remain in the islands.

The heads of these families being without employment, the idea was conceived of taking advantage of act No. 2254, referred to, and of locating these families in a suitable place in the islands. Governor General Harrison, on April 2, 1914, appointed a board to investigate and report upon a suitable location for the establishment of an additional agricultural colony in which such of these people as were of good character and gave hope of success in an agricultural life could be located.

This board selected the site at Momungan. Suitable lands were surveyed and set aside, in order that each head of a family might take up a homestead, and other lands were reserved in order that the homestead might be enlarged. One can readily appreciate the doubts of the success of a sociological and agricultural experiment of this nature. One year after the establishment of the colony, however, conditions were such as to remove most of these doubts. It is proposed to place this colony under the administrative supervision of the Bureau of Agriculture.



I visited also the Moro and Filipino colonies established on the Cotabato River. These colonies are under the administrative supervision of the department of Mindanao and Sulu and are receiving constant attention from the governor of that department, as well as from the governor of the Province in which they are located.

In these colonies were approximately 1,000 families, divided equally between Christian Filipinos, recruited largely from the overcrowded Province of Cebu, and Moros of the immediate vicinity. Generally speaking, the Christians and Moros alternated. The details of the operations of these colonies are reported on by the governor of the department of Mindanao and Sulu.

The experiment of having Moros and Christian Filipinos live amicably in the same neighborhood is so far a success, and will continue to be a success if the supervision continues as sympathetic as it has been under Gov. Carpenter, the department governor, and Gov. Bryant, the governor of the Province of Cotabato.

The agricultural progress is, however, beset with difficulties. The land is flat bottom land covered by a dense growth of cogon grass. The sanitary difficulties would seem to be considerable. It is difficult to rid the country of mosquitoes and is difficult to bring into subjection the very heavy tropical growth of grass. Ordinarily, work of this kind would require a greater capital than that which the government can give to these colonists, and it requires a union of effort over a very considerable territory. It is fair to say, however, that the people in the colonies are not discouraged and that those who have supervision over them are enthusiastic.

The Filipino-Moro colonies experiment has great importance, in that it runs counter to two heretofore rather generally accepted theories: First, that the antagonism between the Moro and Christian Filipino was such that they could not live together in peace; and, second, that the rural Filipino was so without ambition that he could not be colonized even to better his condition. Gov. Carpenter is in a fair way to demonstrate the baselessness of both of these propositions if he has not already done so.

#### ROADS.

The road development in the islands is marked. Perhaps no country on earth is so fully equipped with good roads in proportion to its material wealth as the Philippine Islands. The road construction is being continued, and there is no disposition on the part of the people to object to road making. As one intelligent member of the legislature said to me, "We like to build roads because the money is spent in the islands. The labor is employed here and the material is purchased here." This, of course, would not justify, ordinarily, the construction of roads, but it seems to be the line of thought which has been pursued in constructing a good many of the roads where there is little traffic to justify the building, either present or prospective.

Unless there is an early development of agriculture, the maintenance of the present good-roads system will become a heavy burden on the people. It is fortunate that the outlook for agriculture is more favorable than in the past.

**RAILROADS.**

I personally inspected all the lines of the Manila Railroad Co., except the branch to Cabanatuan and the section in Albay, and all of the Philippine Railway Co.'s lines in Panay and Cebu.

I found these lines in every respect in first-class condition, well suited to the general conditions of the community served by them. Just as it has been noted that highway development has not been followed by the agricultural development along the route which might have been anticipated, it is noted that the railroads, particularly in Panay, have not been accompanied by that development which one might expect to follow the construction of a railroad through such fertile territory.

**PRISONS.**

So far as practicable, I visited the prisons at the several points touched by me and carefully inspected the San Ramon Prison in the Province of Zamboanga. There is probably no better equipped prison in the world and none better suited to its purposes than this prison, which has some 400 inmates. The one unfavorable feature is that with the beautiful, well-cultivated land and fine coconut plantation it is not self-supporting. The superintendent believes that it will soon be self-supporting.

The large central prison at Bilibid I visited, but did not inspect further than to see that the high standard which has been established at this prison in the past was maintained.

Prisons in the Philippine Islands compare favorably with the prisons anywhere in the United States.

**POLITICAL CONDITIONS.**

There are in the Philippines three principal political parties: the Nacionalista Party, which is the majority party; the Progresista Party; and the third party, which is an offshoot of the Nacionalista Party.

At present all of these parties favor, with certain modifications, the Jones bill, as it is known, or the bill "to declare the purpose of the people of the United States as to the future political status of the people of the Philippine Islands, and to provide a more autonomous government for those islands." This bill passed the House of Representatives and was considered by the Senate Committee on the Philippines, but not passed at the last session of Congress.

The Nacionalista (or majority) Party seem unequivocally for the bill with the expressed hope that it may be amended in certain ways, but passed without amendment rather than not passed.

The position of the Progresista Party seems to be that stated by the president of that party in articles criticizing the bill published in the organ of the party in the city of Manila. He said:

At this point I wish to say that I do not desire that the "Bill, Jones, No. 2" should completely fail, my only desire, as well as that of many Filipinos, as I understand, being that the bill should be amended in such a manner that it shall constitute a true step toward the establishment of a local government responsible to the Filipino people, not to the Governor General, the President, the Secretary of War, or the Bureau of Insular Affairs, especially in those

subjects in which the international responsibility of the United States is not in any way affected.

Only thus may we succeed in ending the agitations of a political character that have disturbed the country for so many years, making possible a truly stable government accepted by all or by the majority of the Filipinos, if not as the "sumnum" of their aspirations, at least as a step that must lead us irrevocably, sooner or later, to the realization of our national ideals.

The third party advocates the passage of the Jones bill, with the preamble so modified as to provide a fixed date for the independence of the islands.

These parties are apparently, numerically in the order given, with the Nacionalista Party, embracing apparently a large majority of the people.

While not an organized party, there are certain Filipinos negligible in number, who do not favor any bill which contemplates the separation of the islands from the United States.

The Americans in the islands seemed almost unanimously to favor the administrative features of the Jones bill, but a majority seemed to be unfavorable to the preamble.

Generally speaking, all who had studied the bill so as to understand fairly well its provisions seemed to favor the bill as it was, or favored it with a desire that the preamble should be omitted, and that appointments by the Governor General should be effective without the confirmation of the senate created by the bill.

It is doubtful if there are any persons in the Philippines who consider political questions who do not feel that there should be some legislation along the general lines of that proposed. Certainly I received no intimation that there were such during my visit to the islands.

The reason for this was quite evident to those who have followed conditions in the islands during the past eight or ten years. The opinion is practically unanimous that the form of government established in the islands, with an appointive commission as the upper house of the legislature, an elective assembly for the lower house, and with the commission, or upper house, given exclusive legislative authority over one-third of the territory of the archipelago, was no longer workable. The disagreements between the two houses had assumed an almost irreconcilable form. This was displayed in the failure for three years of the legislature to agree on a budget, the most important legislation committed to it. That the failure of the government in its legislative branch was not more apparent was due almost entirely to the personal affection of the Filipinos for Gov. Forbes, then Governor General. This feeling which enabled Gov. Forbes to obtain the passage of many bills through the lower house of the legislature was manifested at the time in many ways, and I can testify that it remains now that Gov. Forbes is no longer in the islands. Notwithstanding this feeling, however, the Filipino opinion is that the form of government had outlived its usefulness, and this opinion is shared by practically all Americans in the islands, even by those who advanced the idea that it should have been remedied by the abolition of the popular assembly.

It may at first glance appear that the form of government is now operating smoothly, since, under Governor General Harrison, the annual appropriation bills have been passed and other bills advocated by

the Governor General have received attention and, in general, been enacted. This conclusion, however, would be erroneous. At present there is what might be called a *modus vivendi* simply because both the upper and lower houses of the legislature are looking forward to the passage of a new organic act to take the place of the present government act which has developed to that point where further progress is impracticable. How long this *modus vivendi* would continue it is impossible to say, but every consideration of prudence urges the passage of a bill which more clearly defines the power to be given to the expression of Filipino public opinion in matters of legislation and the extent to which such power is to be limited by the relation of the islands to the United States.

There is, however, another and an important respect in which the form of government of the islands is defective and which no local good will can correct.

To-day the revenues of the central government are almost wholly derived from customs and internal revenues. Legislation of Congress has withdrawn from the local government power effectually to legislate in respect of either of these taxes.

The local government may not borrow without the express authorization of Congress.

The great wealth of the local government is in the public lands and mines and the local government is without power to enact laws which would bring about the development of these lands and mines.

For thirteen consecutive years the Philippine Commission urged amendment of the public land laws without receiving the attention of Congress.

For five years the commission begged authority to borrow money for needed public works in vain.

Briefly, the local government has been and is without authority to regulate its income, to avail itself of its credit, or to utilize its wealth. As a consequence, a highly efficient government with immense potential wealth is continually checked in its progress.

And to-day, while admiring the beautiful roads of the islands, one is inclined to the thought that their construction was economically without justification because of the lack of agricultural development following their construction. We see the government and the people freely spending money for roads, but without authority to take the necessary steps to develop the territory through which the roads passed.

While I have given above the public views of the political parties of the islands, I am convinced that no serious part of the Filipino people desires separation from the United States at this time, and that the serious people of the islands are wholly without belief that they can foresee clearly the day they would desire this separation. Nevertheless, there is likewise no doubt that all Filipinos look forward, with varying degrees of hopefulness, to the time when they can take over the full responsibility of their own government, and they desire a recognition of this hope by the United States.

Finally, Filipino public opinion in the islands is more favorable to the United States to-day than it has been at any time in the past. This is doubtless, in part, progressive. It is inspired, in part, by their belief that an earnest effort has been made to give them all the participation in the government which in their own interests could

now be given, and, in great part, by the more general belief in the purely benevolent intentions of the United States toward the islands.

We have reached that point in our progress where there must be given to the government of the Philippines that power granted by the pending bill or we shall soon see retrogression in the great works of sanitation, education, and material progress.

Not the least wonderful feature of the work in the Philippines is that it was accomplished by a government in the islands whose natural resources were so without its control. One hesitates even to speculate on what would have been the progress in the Philippines had the act of 1902 given these powers to the Philippine Commission.

### ECONOMIC CONDITIONS.

In studying economic conditions in the Philippine Islands it is necessary to have in mind a few factors that are abnormal and tend to explain apparent contradictions in reports of conditions.

While the Philippine government is self-supporting, the United States Government sends annually to the islands approximately \$12,000,000 for disbursements therein in connection principally with the Army and Navy. The total of the taxes collected in the Philippine Islands per annum is approximately \$18,000,000. The total exports approximate \$48,000,000 per annum, differing but slightly with the total imports. The total circulation in the islands is approximately \$26,000,000.

From the foregoing, it is apparent that the governmental activities in the islands, as compared to private activities, are far beyond anything that we are accustomed to see in the States, and when we consider the large proportion, averaging about 20 per cent, of the entire revenue of the islands, expended in permanent public works, we can see to what an extent business in the Philippines is based on the expenditures of Federal and Philippine Government funds and how out of proportion these expenditures are to the expenditures based on the one great source of wealth of the islands, agriculture.

This has been the case to such an extent that government retrenchment is followed by the cry of hard times on the part of merchants, even though agriculture, on which practically all of the people depend for a livelihood, is fairly prosperous. With the development of agriculture this condition should disappear. The exports from the islands should be many times as great as they have ever been, and there seems now a promise that this will be the case in the near future, particularly if the local government is placed in a position to utilize its resources and credit.

*External trade.*—The European war has greatly increased the transportation rates to and from the islands. It has interfered with the usual markets. At one time there were serious fears that the normal sources of such rice, coal, and fresh beef as were imported would be cut off. Fortunately this was satisfactorily adjusted.

The market for copra is still, however, interfered with, and accordingly the price is depressed. This is one of the principal exports of the islands.

The tobacco market is similarly affected.

Sugar, on the other hand, profited.

Notwithstanding the effects of the war, the total exports for 1914 were exceeded but once in the 10-year period.

Conditions affecting exports likewise affected imports. The total for the year 1914 was exceeded by three years of the 10-year period.

The total foreign trade for the year was exceeded in 2 of the 10 years ending in 1914.

So far, therefore, as the foreign trade is concerned, conditions, with the exception of those depending directly on shipping, indicate normal progress.

Statistics of foreign trade for 1915, to include the time of my stay in the islands, were of the same general nature as those of 1914.

*Internal trade.*—With reference to the internal trade, the tax collections on the business of merchants, manufacturers, and common carriers for 1914 would indicate that the total of the internal business in the islands had been exceeded but once in the preceding period of 10 years. This shows a very satisfactory interior condition, considering the handicaps of business as the result of the European war.

Unfortunately the effect of the war was not equally distributed in all localities and on all occupations. The Manila Railroad Co., which under its concession is required to carry on railroad construction in several places in the islands, dependent, as it is, on British capital, was compelled to curtail very much its program.

The copra and hemp Provinces were also depressed.

On the other hand, there was every indication of increased prosperity in the sugar industry and in those places, such as Iloilo, which depended upon that industry.

The presence in the Philippine Islands of three of the four American members of the Philippine Commission who resigned in 1913 engaged in business bears testimony to the hopefulness of economic conditions in the islands, the more so in that of the members of the Philippine Commission who had left the service prior to that time no one had engaged in any profession or business in the islands.

*Industrial.*—I visited, in so far as possible, the principal manufacturing plants. I inspected three of the largest cigar factories. While this was one of the industries that had been unfavorably affected by the war, the plants were working in full force and there was every indication of prosperity. Incidentally these factories are large, comfortable buildings, sanitary in all details, and under the constant inspection of the bureau of health.

I visited the sugar central at San Carlos in Occidental Negros, and the central of the Calamba Sugar Estates Co. on the Calamba friar estate. I found conditions at both of these places encouraging. These are two of the three largest modern centrals in the islands.

During my stay in the islands the insular board appointed for that purpose had determined on the erection of a Government-assisted central at Isabela in Oriental Negros, and an invitation for bids on its construction was issued. It would seem that the success of this central is unquestioned, as it is to be built in one of the best sugar sections of the islands where the necessary cane is assured.

During my stay in the islands the cement mill at Binangonan, near Manila, began operations. There has been talk for a number of years in the Philippines of establishing cement mills, but this is the first practical step taken. The mill was established on purely Filipino initiative and with Philippine capital.

I inspected on the island of Mactan in the Province of Cebu the plant under construction by the Visayan Refining Co. This will be by far the largest manufacturing plant in the islands outside of the city of Manila. The work of construction was progressing rapidly and the manager of the plant expected that it would be ready for business by January 1, 1916. Judging by the very encouraging success of the similar plant in Manila of the Vegetable Oil Co., this plant should be a success and will mean a great deal to the islands. It should be noted that the export of coconut oil from the islands has increased from a total of \$40 in 1912 to a total of \$2,619,183 in 1914. This increase is due entirely to the mill of the Vegetable Oil Co. in Manila.

I visited the gold-mining section of Masbate, where several mills are located, and I inspected the largest of these—that of the Colorado Mining Co. This company employs about 700 men and is operating to its full capacity. Shortly after my departure this company declared a dividend of 10 per cent, which indicates the confidence of its managers.

*Household industries.*—I spent two days in the small mountain town of Lucban. This town is known for its delightful climate and for the manufacture of hats from the buri palm. These hats are similar to the Panama hat of commerce. Hat making is here a household industry, and it was very noticeable that practically every woman and child appearing at the windows had in their hands a hat on which they were working. These hats have been heretofore, in the greater part, sold to dealers for export to Italy and Germany. The war had interfered to some extent with the normal demand. This, however, creates only temporary difficulty, as the hats will find a ready and perhaps better market in the United States. I understood that the prices had been depressed a little, but the supply never equals the full demand.

Other household industries, such as the manufacture of mats, baskets, pottery, embroidery, lace, etc., and the various Philippine cloths, were all progressing along normal lines.

Broadly speaking, the condition of industrial and commercial industries in the Philippine Islands is normal and is particularly fortunate in being so during this period of general disturbance.

*Agriculture.*—This has been discussed generally elsewhere. As, however, agriculture is almost the exclusive source of wealth in the islands, one must understand that without development in agriculture it is idle to anticipate more than spasmodic development in industrial or commercial lines. Unfortunately the agricultural development has been slow. In the production of rice and sugar we have never exceeded the most prosperous years of Spanish control of the islands, and many of the Provinces bear evidence to-day of not being so productive as they have been in years prior to the insurrection in the Philippines. In other words, these Provinces have never recovered. Too much of the commerce of the Philippine Islands has been predicated on large governmental expenditures and expenditures for the Army and Navy in the islands and, with retrenchment on the part of the government and the removal of troops from the islands or from one section to another, there has been a tendency to complain of hard times.

Unfortunately the part of the community most affected by these changes has been the American business element. In Iloilo during my visit there was evidence of such prosperity as there had not been in Iloilo within the memory of man, and yet some of the American business people there were depressed because their business had to so large an extent been contingent on the continued presence there of the garrison of American troops, which had been removed.

*Labor.*—On the Manila Railroad and the Philippine Railway, with the exception of a few directing positions and higher technical positions, such as civil engineer, all the operations are carried on by Filipinos, who, in addition to the laborers of the road, are the station agents, conductors, locomotive engineers, and constitute the principal clerical force. Some of the mechanics are Chinese or Japanese.

A similar condition exists in the Manila Electric Railroad & Light Co. The railroad managers are thoroughly pleased with Filipino labor, and, in fact, the impression is general that more satisfactory labor could not be gotten in any country for these purposes.

In the sugar mills, shipbuilding, and other industrial plants the same condition exists. On the steamships engaged in interisland traffic, governmental and otherwise, the sailors, subordinate, and, in some cases, the principal officers are Filipinos. Expression is general that they are very satisfactory.

However, Filipino labor must in its great part be employed in agriculture. Unfortunately, this seems the point at which the Filipino laborer is weakest. This is witnessed by the general condition of agriculture in the islands, and is the general complaint of landowners and those who employ labor directly or who have Filipino tenants. There seems no doubt that this is due mainly to inherited conditions and to the unsatisfactory relation of agricultural employers and landowners to their laborers and tenants. It is observed that in such properties as the San Carlos Milling Co. and the Calamba Estates Co. there is little or no trouble with labor. The trouble seems to be where the old conditions continue and these are the general conditions, such estates as those mentioned being exceptional.

When I visited on Masbate the mine and mills of the Colorado Mining Co. I found there employed nearly 700 Filipinos. Most of these men had been agricultural laborers who had been transferred to this employment. Col. McCoy, the president and manager of the company, who was with me at the time of my visit, expressed the greatest satisfaction with Filipino labor. He explained that the men in starting were, in general, irregular in their appearance for work; that during the month the average man would work from 10 to 15 days. He authorized a bonus to those men who worked over 24 days a month and now the bonus has become practically a part of the monthly pay, as practically the entire force works more than 24 days a month.

The Filipino, when satisfactorily employed, continues indefinitely with his employer. On the Manila Railroad there are employees of all grades who have been with the company since the date of its beginning operations in 1888. I saw laborers on the right of way who were pointed out to me by the president of the railroad as having been so employed, and I saw their first Filipino locomotive engineer, who was still employed on the railroad. These were indicative of a



general condition, and the laborers employed on the railroads outside of Manila were, in general, men who had been agricultural laborers.

It seems clear that to stimulate agriculture in the Philippine Islands it is necessary to bring about a more satisfactory condition of the laborer; that is, the laborer must perform more work and he must perform it in the belief that he is going to be benefited by it. It is not easy to change the customs of ages, and it is not desirable to make revolutionary changes. It is probable that if there were scattered throughout the islands, as there might well be, large estates under modern management, the conditions would be corrected thereby, and possibly it is the only way in which they could be corrected; but it would seem to be the duty of the agricultural bureau of the Philippines and of the labor bureau to investigate carefully conditions of the employment of agricultural labor and to suggest a gradual modification of existing conditions, so as to induce the laborer to work more and the employer to give him a larger benefit from the product of his labor.

When due allowance has been made for the various pests that have followed war and insurrection in the Philippines and for the recurrence of droughts unprovided against by irrigation and the visits of typhoons, against which there is no provision, the lack of progress in the Philippine Islands in agriculture still requires further explanation.

That the Philippine Commission from its organization appreciated the necessity of developing agriculture is apparent from its reports and is within the personal knowledge of those who have observed the working of that body. The difficulty seems to have been that the recommendations frequently made by the commission as to the public lands of the islands, an early recommendation as to immigration and similar recommendations which would have brought about results beneficial to agriculture, were unheeded. This brought with it a natural discouragement and the energy which should have been devoted preferentially to agriculture was devoted, in large part, to the development of those things which it was within the power of the local government to develop without assistance from Congress.

The backward state of agriculture in the Philippine Islands, more than anything else, points to the compelling necessity of granting to the local government in the Philippine Islands greater authority than it has had heretofore.

#### GOVERNMENT FINANCES.

*Central.*—Unless one has clearly in mind the very large portion of the expenditures of the Philippine government that have been made for permanent public improvements, one would get the impression that since the end of the fiscal year 1910 (June 30, 1910) the financial condition of the Philippine government had grown steadily worse. If, however, one gives proper value to the public works constructed and now in beneficial use, the resulting condition becomes one of only temporary difficulty, to be justified or not, according to one's judgment of the timeliness and value of the work accomplished.

In the three fiscal years 1908, 1909, and 1910 there was expended for public works, from the proceeds of bond sales, \$2,150,000, and from revenue funds, \$3,800,000. In the fiscal years 1911, 1912, and 1913 there was, on the other hand, expended for public works, from the proceeds of bond sales, \$500,000, and from revenues, \$8,280,000.

The natural result of this was that, notwithstanding there was in each of these latter years an excess of revenue over expenditures, other than for public improvement, the payment from the current revenues of such large amounts for public improvements had the effect of materially reducing the net working surplus of the government, so that a working surplus of approximately \$9,500,000 on June 30, 1910, had been reduced to \$7,100,000 on June 30, 1913. This reduction of the net working surplus resulted from carrying on a uniformly heavy plan of permanent improvements in the belief that the improvements were necessary to the progress of the islands, anticipating authority from Congress to cover the expenditures in part by an issue of bonds. The bond issue was not authorized. As a result of this, the unappropriated surplus of the government was reduced below what had previously been considered a safe amount. Even to maintain the working surplus at the amount stated it was necessary to make available funds that had been theretofore earmarked for other purposes. In practice this had very much the effect of making liquid certain assets of the government and prevented, to the extent availed of, the further obtaining of funds from those sources.

This of itself would have been the source of no difficulty had the program of public works been at that time completed. Such, however, was not the case, and it became necessary to suspend the large expenditures for public works, the only alternative being the contracting of a floating indebtedness, which has never been necessary in our government of the Philippine Islands.

The difficulty was emphasized in the last half of the year 1913 by a material decrease in revenue, due largely to the abolition by the tariff act of 1913 of the export tax in the Philippines.

As a result of these two conditions the net working surplus was reduced on December 30, 1913, to \$5,600,000, of which but \$250,000 was in cash available for appropriation.

The financial operations of the central government for 1914 were, briefly, in round numbers:

Net income.....	\$10,400,000	
Liquidations of assets of the government.....	1,000,000	
		\$11,400,000
Governmental expenses.....	8,000,000	
Fixed charges.....	800,000	
		8,800,000
Excess of revenues over governmental expenditures.....		2,600,000

But during the year \$1,300,000 was expended on permanent improvements and \$2,700,000 was given in aid to local governments.

This would indicate a deficiency in revenues for the year of \$1,400,000. It will be observed that this deficiency is created largely by assistance given to the local governments, provincial and municipal.

It is evident that the government could not continue expenditures in excess of its revenues, even though the expenditures are for public

improvements which become permanent assets, or for assistance to the provinces and municipalities. Therefore at the session of the legislature in 1914-15 additional internal-revenue taxes were imposed. By the provisions of the act these taxes were imposed for the fiscal year 1915. The fiscal and calendar years in the Philippine Islands are now identical.

The imposition of these additional taxes is in a fair way to make the revenues of the government for the current year exceed the expenditures for all purposes.

The additional taxes, however, being only for the year 1915, it is necessary to make some provision to prevent a future excess of expenditures over revenues, and it is expected that a new internal-revenue law will be enacted at the present session of the Philippine legislature.

The constantly increasing amount advanced by the central government to the provinces and municipalities is indicative of a condition which calls for correction. Either taxation should be revised, in order that the provinces and municipalities shall be self-supporting, or certain of the expenditures now classed as provincial and municipal should be taken over by the central government. Public opinion in the Islands, as elsewhere, seems to favor the first alternative; that is, a readjustment of taxation so as to make the provinces and municipalities self-supporting without giving up any of their present functions.

It is altogether probable that this view will lead to a certain loss of efficiency, which will perhaps be the price paid by the local governments for the satisfaction of expending their own funds rather than permitting them to be expended by the central government. There is no doubt that the work can be done more economically by the central government.

The total bonded indebtedness of the Philippine government is:

	Amount.	Re-deem-able.	Due.
Land purchase bonds, 4 per cent.....	\$7,000,000	1914	1934
Public works and improvement bonds, 4 per cent.....	2,500,000	1915	1935
Public works and improvement bonds, 4 per cent.....	1,000,000	1916	1936
Public works and improvement bonds, 4 per cent.....	1,500,000	1919	1939

The balance in the sinking fund for the payment of the land-purchase bonds on December 31, 1914, was \$1,927,980.59. The balance in the sinking fund for the payment of the public works and improvement bonds was on that date \$855,832.58. There is no other indebtedness of the Philippine government.

The government, however, has under its contracts with the Manila Railroad Co. and with the Philippine Railway Co. a contingent liability to advance the interest on certain 4 per cent interest guaranteed bonds of these companies in case the companies should be unable from their income to pay this interest. Under this contingent liability the government had advanced on the 31st of December, 1914, a total of \$1,317,448.50, practically all of which was on account of the Philippine Railway Co. The Manila Railroad Co. has generally earned the interest on its interest-guaranteed bonds.

The amount advanced by the government under these contracts becomes an indebtedness of the railroads to the government, payable at the end of the period for which the interest is guaranteed, about 1937. In practice this guarantee has the effect of requiring the government to advance in payment of interest approximately \$250,000 a year. This amount is gradually decreasing.

However commendable the program of public-work construction may be, I am of the opinion that there should be a marked decrease in the construction of nonproductive public works, and that expenditures in the near future should be directed more largely to increasing the agricultural output of the islands. To maintain in their present excellent state the highways of the islands requires an annual expenditure of approximately \$1,000,000, and as the mileage of these roads is increased the cost of maintenance is also increased. This becomes in its nature a fixed charge. Fortunately, the roads have been constructed very largely from revenue. Therefore, there is very little in the way of bonded indebtedness due to the roads. The maintenance charge, however, is a very large charge against the total government revenues which approximate \$18,000,000 per annum.

*Provinces.*—The total indebtedness of the Provinces of the Philippine Islands is approximately \$1,900,000. This indebtedness is to the insular, or central, government which has from time to time made loans to the Provinces from funds subject to its control. No Province has issued bonds or has outstanding public indebtedness.

The total provincial revenues approximate \$3,500,000. There has been a disposition to increase the expense of the provincial governments without increasing their revenues. This has necessitated an increasing amount of assistance from the central government. The legislature is now considering the question of readjusting revenues, as heretofore stated, in order that this continual assistance from a central government may be avoided.

*City of Manila.*—The revenues of the city of Manila are approximately \$1,500,000 per annum, which is supplemented by \$625,000 contributed by the central government, and for the past two years the expenditures and fixed charges have slightly exceeded this amount. The city of Manila has a bonded indebtedness of \$4,000,000, which becomes due \$1,000,000 in 1935, \$2,000,000 in 1937, and \$1,000,000 in 1938. On December 31, 1914, there was a sinking fund of \$310,000.

*Municipalities.*—The total income of all the municipalities and townships and settlements of the Philippine Islands is approximately \$3,750,000 per annum, which is slightly in excess of their expenditures other than for public works. Loans to the municipalities, other than the city of Manila, have been made from time to time from funds controlled by the insular government.

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A consideration of the foregoing statements and of the large expenditures for public improvements made from revenues show that the finances of the Philippine Government are in good condition. Such difficulties as have occurred have been temporary and almost entirely due to the lack of control which the insular government has over its borrowing power. This has had, with the natural disad-

vantages, the great advantage of preventing a large public indebtedness of the islands. The temptation to contract large indebtedness in connection with the public works which have been executed in the islands and those which are deemed essential to further progress would have been, it is believed, too great for the local government to have withstood.

It is believed, however, that a sufficient check would have been the requirement of the approval of the President prior to contracting indebtedness rather than the necessity of obtaining affirmative legislation from Congress. It is thought that nonproductive public works should be proceeded with cautiously, pending a development of the producing capacity of the islands. The latter is the great necessity at this time and should precede further heavy expenditures on other public works.

#### THE CITY OF MANILA.

The city of Manila is fast becoming, if it is not already, the most beautiful of the larger commercial cities of the Far East.

In addition to being the capital of the islands, it is the chief commercial port and business center. It is the location also of the larger industrial plants. While the islands are widespread, Manila is the recognized center. There has been at times, and is at present, a tendency in the extreme southern islands to make Singapore the commercial Mecca rather than Manila. In the interest of the community of the islands an effort should be and has been made to overcome this. Manila, being the seat of the central government, owes a great deal of the recent improvement to that fact. A great deal of the recent work has been done directly by the central government, and in the natural order of things a great deal more will be done in future. Furthermore, the city of Manila is assisted annually by a very considerable appropriation, now fixed at not to exceed \$625,000 per annum, which goes to the maintenance of the government of the city.

By act No. 183, enacted by the Philippine Commission July 31, 1901, a charter was granted to the city of Manila. This charter vested the government in a municipal board consisting of three members to be appointed by the Governor General, by and with the consent of the Philippine Commission, and to be removed in the same manner, and it prescribed the duties of the several members of the board. This was later modified in some respects, and finally, by act No. 1869 of the Philippine Legislature, passed June 18, 1908, the government was vested in a municipal board consisting of six members, three to be appointed by the Governor General, by and with the consent of the commission, and to be removed in the same manner, an ex officio member—the city engineer—and two members to be elected from the city of Manila.

This modification has in practice proven detrimental to the interests of the city. A return should be made to the former smaller board and to the principle on which the original law was based, which recognized Manila as a city of the Philippine Islands rather than a city of those who reside therein. Local politics should not enter into the management of a city which is alike the seat of the government and the principal industrial and commercial center of the entire islands.

The local population of Manila has its representation in the assembly and has never been without its representation on the appointive commission, or upper house.

The situation created by the addition of the elected members to the board is such that a transfer of the capital from Manila is seriously considered by leading Filipinos. This would be no remedy, in so much as Manila would continue to be the principal port and the industrial center of the islands.

The organic act of the Philippine Islands should provide that the government of the capital city of the islands should be vested in a board consisting of three members, to be appointed by the Governor General of the islands.

#### THE DEPARTMENT OF MINDANAO AND SULU.

Probably the most important office under the Philippine Commission to-day is that of governor of the Department of Mindanao and Sulu.

This department includes seven Provinces, about one-third of the area of the Philippine Islands, practically all of the Mohammedan and about one-third of the pagan population of the islands, together with a considerable Christian population.

Because of the turbulent nature of its inhabitants it had, under the Spanish administration and under ours until December, 1913, been treated largely as a military problem. Gen. Pershing, the last military officer holding the office of governor of the Moro Province, became convinced that with his departure conditions would be ripe to establish in that region a purely civil government.

This view was adopted, and on his departure in December, 1913, Governor General Harrison appointed, to succeed him as governor, Frank W. Carpenter. This selection was made with due appreciation of the delicacy and difficulty of the task imposed on the new governor, whose entry on his duties was practically coincident with the withdrawal of all American troops from that region.

It was felt that the most difficult task was imposed on the man who by experience was best qualified to undertake it.

Mr. Carpenter had for years, as assistant executive secretary and executive secretary, been most intimately associated with the Filipino people. He had won their confidence and affection.

My visit to his department satisfied me that his selection had been a wise one. Customs inherited through ages may not be forgotten in a few months, and it is perhaps too much to expect that the turbulent Moros have become for all times men of peace. There was certainly no indication of disorder at the time of my visit. There was not only a spirit of friendliness displayed by the Moros to Americans, but to the young Filipinos—men and women—whom Gov. Carpenter was introducing in his school and sanitary work among the Moros and pagans there was extended a welcome apparently from the heart.

Too much can not be said in praise of the fine spirit of these young Christian Filipinos who had begun this work in Mindanao and Jolo. I am not sure that they were not moved somewhat by the desire to show that the Christian Filipino and the Moro were not antagonistic and that the peculiar hostility of the Moro to the Filipino, so much talked of, was a myth.

Whatever the motive, a dreary task is being undertaken with a fine spirit and with most remarkable success.

Gov. Carpenter's annual report, to be published as a part of the Annual Report of the Philippine Commission for 1914 (Reports of the War Department for 1915, vol. 3), is a relation of a striking piece of work well done. Conditions, as I found them, verify, as well as two years' time permits of its verification, the wisdom of Gen. Pershing's recommendation of a civil government in the Moro Province and of Gov. Harrison's selection of the civil governor.

#### THE GOVERNMENT OF THE PHILIPPINE ISLANDS.

One hears in the Philippine Islands criticism of the insular government. I heard such criticism while there. It is evident, though, that much of the criticism which we see published in the United States is not heard in the islands by those who have intimate knowledge of the affairs of the government there. Such criticisms are, in great part, reserved for those who are ignorant of conditions in the islands, present and past.

In general, the criticisms, in so far as definite grounds therefor could be obtained and in so far as they affected the executive departments of the government, were without basis or trivial in character.

I heard no criticism whatever in the islands affecting the integrity of any official of the government. Minor employees have from time to time been discovered as defaulters and guilty of dishonest practices. In the early days of the organization of the Philippine government the number of such offenders was quite large, due to the necessity of selecting employees from those available and without the careful investigation of their character under rules which the commission adopted and applied as soon as practicable. Thereafter, as the result of an improved civil service, the number of defalcations and irregularities was greatly reduced, and this favorable condition has continued.

The detection of crimes of this kind is largely the result of the constant inspections by the auditor's office, and the auditor's office in the islands to-day leaves nothing to be desired.

The bureaus of the government have at their heads men long in the civil service of the Philippine government. Notwithstanding the loss of some excellent men as the result of retrenchment and voluntary resignations, the bureaus of the Philippine government had never had at their heads men of as long average service in the islands. The bureau of customs and of internal revenue, the two bureaus from which the government receives its principal revenues, are, as at present organized, highly efficient, and no bureau of the government is headed by an inexperienced or inefficient man.

The governing boards in the Provinces and municipalities are elective and display a varying degree of efficiency. I examined more closely the Province of Tayabas and the municipality of Lucban. Knowing the impossibility of examining all or a large number, I took the Province of Tayabas as typical, and I selected the municipality of Lucban because it was remote from the railroad and traversed by no improved highway. I found conditions in the Province and in this municipality to be highly creditable to the local officials.

These officials took the greatest pains to show me and to explain to me every detail of local administration. They were apparently proud of what they were doing, and their pride was justified by conditions.

One of the most agreeable impressions of my travels in the islands was the kindly feeling of the Filipino people toward Americans and the warm feeling of personal regard they evinced for those Americans who were working with them in the government service. I found this feeling generally throughout all the Provinces and municipalities visited by me. This is a condition which reflects credit alike on the American officials and on the people among whom they work.

In closing, I can quote, as fully applicable to conditions as they exist in the islands to-day, what Secretary Dickinson said in his report of 1910:

I am satisfied and I believe that anyone who makes a careful study of the personnel of the Philippine government will feel that the United States has just reason to be proud of the government it has established in the Philippine Islands.

The high motives which prompted Governor General Harrison's acceptance of his office have guided his conduct thereof. He has labored unceasingly, and as a result of these labors he has gained the admiration and respect of the people of the islands. As a consequence, the excellent state of law and order prevailing in the Christian provinces of the Philippine Islands is better assured than it has been at any time in the past, while the penetration of schools and sanitary work in the portions of the islands inhabited by the wild people and Moros, particularly the latter, is beyond the most sanguine expectations of two years ago.

The unfortunate condition existing in the legislature which resulted in a failure for three years to pass the annual appropriation bill and the failure to provide revenues by necessary taxation has been replaced by a spirit of good will and cooperation between the two houses. Appropriation bills have been passed promptly, and additional taxes have been imposed to meet the heavy public work expenditures which the legislature does not wish to suspend.

The legislative treatment of the Moros and other non-Christian inhabitants not represented in the legislature has been more liberal than at any time in the past.

Very respectfully,

FRANK MCINTYRE,  
*Chief of Bureau.*

HON. LINDLEY M. GARRISON,  
*Secretary of War.*



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APPENDIXES.

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## APPENDIX A.

### ITINERARY OF GEN. McINTYRE.

1915.

- |           |   |
|-----------|---|
| July      | 31. Manila.   |
| August    | 1. Manila.  |
|           | 2. Manila.  |
|           | 3. Manila.  |
|           | 4. Manila.  |
|           | 5. Manila.  |
|           | 6. By rail to Batangas and Pagbilao; by highway to Atimonan and return.   |
|           | 7. By rail to end of line, walking 3 miles to southern line, thence to Hondagna by rail, returning to Lucena, Tayabas Province.   |
|           | 8. Lucena, thence to Lucban via Tayabas.  |
|           | 9. Lucban.  |
|           | 10. Manila; night of 10th, at Los Banos.  |
|           | 11. Manila.   |
|           | 12. Left Manila for Mangalden; thence by automobile to Baguio via Benguet Road.   |
|           | 13. Baguio, leaving in afternoon, via Naguilian Road, for Bauan and San Fernando.   |
|           | 14. Arrived Vigan, via San Fernando and Tagudin.  |
|           | 15. Vigan, attending inauguration of waterworks system.   |
|           | 16. Left for Laoga, Ilocos Norte, returning to Vigan same evening.  |
|           | 17. Left Vigan, arriving Manila morning of the 18th via Bauan.  |
|           | 18. Left Manila 11 p. m. for southern trip.   |
|           | 19. At sea.   |
|           | 20. Arrived Capiz, going by Philippine Railway to Iloilo and leaving there at midnight.   |
|           | 21. Arrived San Carlos, Negros; visited plant of San Carlos Sugar Central and left in afternoon for Camp Overton.   |
|           | 22. Arrived Camp Overton, proceeded in automobile to Dansalan, via Overton-Keithley Road, passing through Camp Keithley. Crossed Lake Lanao in launch to Tampanan, returning Dansalan; thence to Camp Overton en route to Jolo. |
|           | 23. Arrived San Ramon Penal Farm and inspected prison, leaving in evening for Jolo.   |
|           | 24. Jolo. Automobile trip across island to Maimbung and Indana, leaving at noon en route to Cotabato.   |
|           | 25. Arrived at mouth of Cotabato River and proceeded up river, stopping at Cotabato town and Dulauan.   |
|           | 26. Arrived at Fort Pikit, visited fort, proceeded down river, making several stops.  |
|           | 27. Arrived Zamboanga.  |
|           | 28. Left Zamboanga for Cebu.  |
|           | 29. Arrived Cebu.   |
|           | 30. Cebu.   |
|           | 31. Cebu.   |
| September | 1. Arrived Aroroy, inspected Colorado Mining Co. mine and mills, en route to Manila.  |
|           | 2. Arrived Manila.  |
|           | 3. Manila and vicinity.   |
|           | 4. Manila and vicinity.   |
|           | 5. Manila and vicinity.   |
|           | 6. Manila and vicinity.   |
|           | 7. Manila and vicinity.   |
|           | 8. Manila and vicinity.   |
|           | 9. Sailed from Manila.  |
| October   | 11. Arrived San Francisco.  |

## APPENDIX B.

**EXTRACTS FROM THE REPORTS OF THE PHILIPPINE COMMISSION  
ON THE SUBJECT OF RINDERPEST, 1905 TO 1913, INCLUSIVE.**

[Extract from report of Gov. Gen. Luke E. Wright, Nov. 1, 1905 (Philippine Commission Report, 1905, pt. 1, p. 84).]

The rinderpest and other diseases which afflicted the carabao, horses, and cattle have been practically exterminated, and while the people still need more work cattle than they have, the supply is slowly but steadily increasing. The insular government, through its board of health, has kept a large force of men in the field who have inoculated the cattle, and this made them immune against rinderpest. It is believed that there is no further danger from this source.

## INOCULATION AGAINST RINDERPEST.

[Extract from report of Dean C. Worcester, secretary of the interior, Oct. 20, 1905 (Report of the Philippine Commission, 1905, pt. 2, pp. 47-49).]

Late in the year 1902 the manufacture of antirinderpest serum was begun by the bureau of laboratories. This serum, if injected hypodermically in proper quantity, affords a temporary immunity against rinderpest, which ordinarily lasts from one to two months. Permanent immunity may be secured through inoculation by the so-called "simultaneous method," which consists in injecting 1 cubic centimeter of virulent blood from a sick animal on the one side and 30 cubic centimeters of serum at the same time on the other. The result is ordinarily a very slight attack of the disease, which does not prejudicially affect the general health of the animal inoculated and confers permanent immunity.

The difficulty involved in this method arises from the varying susceptibility of individual animals to rinderpest. The majority of Philippine cattle may be classified as normal, and with normal individuals inoculation by the simultaneous method is uniformly successful. Some animals, however, have a greater or less degree of natural immunity. This fact is discovered when they are inoculated by the simultaneous method for the reason that they fail to develop fever. The operation is then repeated until they do react, more virulent blood and less serum being used each time. A small percentage of animals are, however, highly susceptible. With this class the usual dose of serum fails to hold the disease in check, and it may terminate fatally.

The percentage of mortality which may be expected has been found to vary widely in different countries and with different breeds of cattle, this variation depending partly upon varying susceptibility to rinderpest and partly upon complications with other cattle diseases generally prevalent in the countries in question.

The first simultaneous field inoculations in the Philippines were carried on by veterinarians employed by the bureau of laboratories, and were extremely successful, the mortality being only 3.44 per cent.

Under general provisions of law the board of health for the Philippine Islands was charged with the combating of infectious diseases of animals. During my absence in 1903 the commissioner of public health insisted quite strongly that cattle inoculation be turned over to the board of health. This was done, and a veterinary division was established in that bureau.

In my opinion, sufficiently careful supervision has not been exercised over the veterinary division. In at least two instances veterinarians did careless work, which resulted in heavy mortality and created strong local prejudice against the inoculation. The corps apparently became alarmed, and the simultaneous inoculation was abandoned and serum alone was employed to stop the spread of the disease. This change of policy was adopted without my knowledge or approval. It, of course, pleased the more ignorant owners of cattle, who were delighted when the spread of the disease was promptly checked in their herds by the use of serum, with no mortality among animals not actually infected at the time of inoculation, while some 60 per cent of the infected animals were cured.

If the insular government had abundant means and the necessary corps of veterinarians, it could unquestionably protect the cattle of the Philippines against rinderpest by inoculation with serum alone; but the expense involved

would be enormous, for the reason that the immunity conferred is only temporary, and after two or three months rinderpest is likely to reappear in the very herds where it has been checked. If permanent results are to be secured, the simultaneous method, or some modification of it, must be employed.

Recently two important additions have been made to our knowledge relative to the use of antirinderpest serum. One is that the serum may be used not only as a preventive agent to protect well animals, but also as a curative agent for those actually diseased. For the latter purpose it is best to inject directly into the jugular vein. The chief veterinarian states that of the infected animals treated with serum only 40 per cent have died, as against approximately 85 per cent of those not so treated. In other words, 60 per cent of the animals treated have been saved. The second discovery of importance is that if the serum be used upon an animal on a given date, and virulent blood be injected 10 days or two weeks later, permanent immunity is secured and the percentage of mortality is reduced, with Philippine animals at least, practically to zero. At the serum laboratory, where this method is now exclusively used, not a single animal has been lost during the past year as a result of inoculation.

There is not the slightest doubt as to the efficiency of inoculation by the simultaneous method or by the modification of that method above referred to, and complete demonstration of this fact is furnished every day at the serum laboratory, where it is necessary to keep constantly on hand a supply of animals suffering from rinderpest in order that virulent blood for the making of serum may be available. The whole place is so infected with the disease that if animals which have not been immunized are brought there they promptly sicken and die. Immunized animals, however, may be and are kept there constantly and never contract the disease.

It may therefore safely be said that the problem of doing away with rinderpest in these islands reduces itself to one of administration and of overcoming popular prejudice where such prejudice exists. The latter difficulty is not of a permanent nature. When the people once become familiar with the results of inoculation they are no longer opposed to it. In point of fact, requests for inoculation have come in during the past year far more rapidly than they could be acceded to.

The administrative problem, which involves keeping the veterinarians supplied with serum at remote points in the archipelago and the exercise of necessary supervision over their operations, presents no insuperable obstacles, especially as the serum will, under reasonably favorable circumstances, keep six months.

Were it possible in the Provinces to use serum first and follow it after a suitable interval with virulent blood, a good deal of loss to property owners might be saved, but this is difficult, especially in the case of the more ignorant classes, who are satisfied to have their animals temporarily protected against the disease by serum, and are unwilling to return them for inoculation with virulent blood.

At the present time veterinarians are instructed to use serum inoculation on herds in which rinderpest has appeared, as inoculation of diseased animals by the simultaneous method would be apt to result fatally. The use of the serum temporarily protects the animals which are not infected and cures many of those which are actually diseased. After a suitable interval the veterinarians then return and inoculate all of the animals with virulent blood, thus conferring permanent immunity upon them.

In the event that a property owner will not consent in advance to subsequent inoculation with virulent blood, veterinarians are instructed to decline to use serum on his herd. All inoculations of animals belonging to herds which are free from disease are by the simultaneous method, or with serum followed by blood, as circumstances make necessary.

Especial attention is being given to inoculation of animals in the sugar and hemp producing Provinces. In western Negros the systematic inoculation of all cattle in the Province has been requested by the people, and is being performed with the cooperation of the provincial and municipal authorities. The islands will be covered, Province by Province, as rapidly as circumstances will permit. During the year rinderpest has been temporarily checked in 22 Provinces.

The disastrous results of attempting inoculation of the recently imported dairy herd against rinderpest caused groundless loss of confidence on the part of many persons in the efficacy of this treatment. It should be remembered that these inoculations were made on animals which had come from a country

where the disease had never existed, and which had just made a long overland journey, followed by a sea voyage of 10,000 miles. The results made it evident that much greater care was necessary in dealing with such animals, but threw no light on the question of the value of simultaneous inoculation in dealing with rinderpest among Philippine cattle under ordinary conditions. Conclusions on the latter subject must be drawn from actual experience, the results of which have been such as to afford an overwhelming argument in favor of the inoculation.

#### DIVISION OF ANIMAL INDUSTRY.

[Extract from report of Dean C. Worcester, secretary of the interior, Sept. 1, 1903 (Report of the Philippine Commission, 1906, pt. 2, pp. 48-49).]

Under the provisions of act No. 1407, the veterinary corps was transferred from the bureau of health to the bureau of agriculture on October 19, 1905, and in the latter bureau a division of animal industry was established, which included not only the work of veterinarians in the inspection and control of animal diseases, but the work of the stock farm at Baguio, where experiments are being conducted in the breeding of horses, cattle, sheep, goats, and hogs; horse breeding throughout the islands by the use of improved sires imported by the bureau of agriculture and loaned to the provincial governments and private persons; and the dairy farm at Manila.

When this work was taken over a severe outbreak of rinderpest prevailed in western Negros, and another existed in the Province of Zambales. Inoculation by the simultaneous method was used in Zambales with complete success, the mortality among the inoculated animals being extremely low, and complete immunity being obtained. The same method was employed at the outset with equal success in Negros, but after a short time an extraordinarily high mortality developed, which necessitated the immediate dispatch of an employee of the bureau of science in order that the cause might be ascertained. It proved to be due to the prevalence of surra in the infected herds. Carabao infected with surra may continue to live and work for years, but while inoculation by the simultaneous method of healthy animals is attended ordinarily with a loss of but 3 or 4 per cent, costly experience in Negros abundantly demonstrated the fact that the same method employed on animals infected with surra caused a loss of approximately 50 per cent.

As the surra infection proved to be general in the towns north of Bacolod, it was obviously impracticable to use the simultaneous method there, and serum alone was employed. It has proved a very simple matter to stop an epidemic of rinderpest with serum, but the immunity thus conferred is transient, lasting at the best but two or three months. After the disease had been fully controlled in Negros an effort was made to interest some of the more important hacenderos of the Province in the establishment and maintenance, for their own protection, of a cattle quarantine. This Province imports carabao and cattle from all over the archipelago, and the fact was pointed out that rinderpest would inevitably be reintroduced unless adequate quarantine measures were adopted. Such measures could be made effective only through the cooperation of the people themselves, as carabao can be landed at almost any point on the west coast of Negros. It proved impracticable to awaken the slightest interest in cattle quarantine, and as a result the disease has again been introduced, has caused serious damage, and must once more be stamped out.

The islands were almost free from rinderpest from January to July. With the oncoming of the rainy season outbreaks have occurred at a number of widely separated points, but have been promptly controlled as soon as men could be got on the ground.

In the Province of Batangas, distant but half a day's journey from Manila, the disease prevailed for two months, and more than 500 head of cattle died before it occurred to the governor to advise the bureau of agriculture. The few men available were immediately dispatched to the scene of trouble, and the results were so satisfactory to property owners that the governor sent an urgent telegram requesting that 20 more inoculators be sent at once.

The treatment with serum of animals actually sick of rinderpest has resulted in the saving of approximately 70 per cent of those treated. As a result of the checking of rinderpest by inoculation the supply of cattle and carabao is steadily increasing. Little by little the people will learn the necessity of promptly informing the director of agriculture when the disease appears in any

given locality, and there would seem to be no good reason why it may not ultimately be eliminated as a serious cause of death among cattle in the Philippines.

#### CONTROL OF INFECTIVE DISEASES.

[Extract from report of W. C. Welborn, director of agriculture, Aug. 10, 1906 (Report of Philippine Commission, pt. 2, pp. 173-177).]

When the veterinary work was taken over from the board of health a severe outbreak of rinderpest prevailed in the beet-sugar growing section of Occidental Negros, where it had caused serious losses among the carabaos and cattle of that Province. There was a scarcity of antirinderpest serum at that time which materially hindered the work of inoculation. The simultaneous method was being used with apparently good success. In a few instances a high rate of mortality was encountered, which proved to be due to complications of surra and hemorrhagic septicemia. This made it necessary to suspend the use of the simultaneous method before the outbreak was fully under control, but by the use of serum in and around the infected centers, the disease was well under control by the end of December. The only other outbreak of importance which prevailed at that time was in the Province of Zambales. Simultaneous inoculation was used there with good success. So far as known only a few scattered cases occurred in widely separated districts during the five months following January 1, the principal Provinces affected being Misamis, Occidental Negros, Albay, and Bohol. Most of the smaller outbreaks were readily suppressed by serum inoculations given to the affected and exposed animals and those in the immediate vicinity. Quarantine measures were enforced as far as practicable, but in the absence of any general law making veterinary sanitary measures compulsory, reliance had to be placed principally in provincial and municipal officers.

The governors, provincial and municipal boards, presidentes, and local officers of the bureau of health have rendered valuable assistance in locating infected centers and suppressing infective diseases.

During the eight months covered by this report 5,780 cattle and carabaos have been inoculated, and 245, or 4.23 per cent, of these died subsequently from rinderpest. From the statistics available, the exact number of animals suffering from the disease at the time of inoculation can not be determined, but practically all of the deaths were among animals receiving serum as a curative agent. In most cases, where the animals were not sick or did not develop the disease in one or two days after the inoculation the serum protected them against a fatal attack. However, it should not be overlooked that in inoculating animals in these islands by either method a great many of these animals are likely to be immune from previous outbreaks of rinderpest. Therefore we should be careful not to claim credit for saving all the animals inoculated that fail to contract the disease. In Germany a few years ago it was reported that inoculation with virulent blood was abandoned because losses were as high as 25 per cent, and because it spread the disease.

Of our inoculations 4,961 head received serum only, with 152, or 3.08 per cent, subsequent deaths; 685 received simultaneous inoculations, with 80, or 11.69 per cent, subsequent deaths; 134 head received virulent blood following about 10 days after the serum inoculation, and of these 13, or 9.6 per cent, died subsequently of rinderpest.

In considering these figures it should be remembered that a much larger number of animals were inoculated with serum only than by either the simultaneous or deferred methods; that the bulk of the animals receiving serum only were never exposed to the disease; and that all of those receiving simultaneous or deferred inoculation are given a cubic centimeter or more of virulent blood, which produces a genuine case of rinderpest, and would in most cases prove fatal but for the serum preceding or accompanying the blood given. On the other hand, all animals suffering from the disease at the time of inoculation are included in those receiving serum only, and it is among these that the heaviest death rate occurs; while all animals given simultaneous or deferred inoculations are judged to be free from rinderpest at the time the virulent blood is administered. It has been observed that animals suffering from surra, hemorrhagic septicemia, foot-and-mouth disease, or Texas fever die readily from rinderpest contracted either by natural infection or virulent-blood inoculation simultaneously with any of them. As the first three frequently exist in communities where rinderpest has appeared, it becomes impracticable to give

any form of virulent-blood inoculation without first eliminating all of these diseases as complications. This is very difficult in the cases of surra and hemorrhagic septicaemia. Texas fever is of no importance with native cattle as they are generally immune to it, but has been a serious complication in imported nonimmune cattle, especially from the Northern States and southern Australia. The virulent blood taken from native animals to inoculate the imported cattle against rinderpest precipitates a case of Texas fever soon after the rinderpest reaction has occurred.

The principal advantages of the serum method of inoculation are that it is easily and quickly administered by any person of ordinary intelligence after a little experience. An inoculator can cover a large territory in a short time; it imparts a temporary immunity which usually protects the animals until an outbreak can be suppressed; it meets with popular favor, which is essential; it can not produce death and may be given indiscriminately to animals suffering from the disease, exposed to it, or free from it; serum will save the lives of a large per cent of animals in which rinderpest has already developed; draft animals may continue to work after inoculation; it requires less serum than the deferred method; and it is the cheapest method for a given number of animals.

Some of its disadvantages are that the immunity produced by serum is only temporary; the animals are liable to contract rinderpest if exposed to it after the lapse of three or four months unless inoculated again; and it requires more serum than the simultaneous method.

The principal advantages of the simultaneous and deferred methods are that they impart permanent immunity to the animals inoculated; it increases the value of the animals because they may be herded or driven where they will be exposed without fear of contracting rinderpest; they are not nearly so liable to carry the infection as nonimmune animals; they may serve as a barrier against the spread of the disease where a large number of immune animals exist in a community.

Some of the disadvantages of these two methods are the high rate of mortality which follows the inoculations; they are purely prophylactic and can be used only with noninfected animals; can not be practiced with safety where other infective diseases exist as complications; slow and tedious of administration, requiring the services of a skilled veterinarian; both methods are more expensive for a given number of animals than the serum method, and if an attempt were made to immunize all the bovine animals of the islands the cost would become prohibitive; they are not in favor among the people and would have to be enforced by legal processes; danger of further spreading the disease, as each animal receiving virulent blood carries the infection and must be kept in quarantine until fully recovered.

Under the conditions which prevail in these islands the serum method promises best results for general use. The simultaneous method may be used to advantage where the country is densely settled and the animals concentrated in large numbers, provided no complicating diseases prevail at the time of inoculation. The deferred method is practical only with small herds of valuable animals, such as imported dairy cattle, and where complications might follow the simultaneous method.

[Extract from report of Dean C. Worcester, secretary of the interior, Oct. 28, 1907 (Report of the Philippine Commission, 1907, pt. 2, p. 52).]

The energies of the division of animal industry have been largely directed toward holding in check this disease, which has appeared at one time or another during the year in the majority of the Provinces. The policy at present pursued is to combat it at all points where it appears by the use of serum only. This practice has the advantage that it immediately checks the disease in any given locality, is not attended with any loss due to the inoculation, and even results in the cure of a very large percentage of the animals diseased at the time of inoculation. It is, of course, very popular with cattle owners. The drawback is that the immunity produced is of a temporary nature, and after two or three months animals which have received only serum inoculation become again susceptible to rinderpest, although if attacked they suffer less severely than do those which have not been immunized.

The simultaneous method of inoculation in which blood from a diseased animal and serum are administered at the same time, confers permanent immunity, and can be effected with a very low percentage of loss, if the animals



inoculated are not suffering from surra and are properly cared for while undergoing treatment. The neglect of owners who sometimes even leave them without drinking water while under treatment and the complications which have arisen through the occasional unsuspected presence of surra have led to so many difficulties that it has been deemed advisable to confine inoculations by this method to animals under treatment at regular quarantine stations except in special cases.

In repeated instances rinderpest has been introduced into provinces which had previously been entirely free from it, through the importation of diseased cattle. The need of an effective quarantine law which would give the bureau of agriculture power to penalize and prevent the shipping of animals suffering from dangerous communicable diseases has long been apparent, but as in the case of all sanitary measures, such a law could not be of practical value until the state of public sentiment justified its enactment. On October 10, 1907, it was believed that this time had come, and an act to prevent the introduction into the Philippine Islands of dangerous communicable animal diseases, to prevent the spread of such diseases within the islands, and for other purposes, was passed by the commission.

Several especially valuable practical demonstrations of the value of inoculation by the simultaneous method have been afforded in the provinces, where animals thus immunized have remained well while nearly all others about them sickened and died. There is now a strong demand for the animals permanently immunized at the serum laboratory, and a private cattle dealer has recently announced his intention of establishing extensive yards and going into the business of permanently immunizing and selling cattle. The highly satisfactory results obtained in checking rinderpest in badly infected herds brought to Manila for slaughter, and in saving the animals already diseased, have been especially appreciated by the public, and it seems not too much to hope that serious popular opposition to cattle inoculation, due to ignorance or superstition, is now decidedly on the wane and that the most serious difficulties in the way of protecting the horned cattle of the Philippines from rinderpest have been overcome. At all events, the demand for serum has been greatly in excess of the available supply and more immunization work could therefore not have been done no matter how great the demand for it. Arrangements have now been made materially to increase the supply of serum, the unexpended balance of the congressional relief fund having been made available for this purpose, and effective means of preventing infection by dust during the dry season have been devised, so that its keeping properties have been greatly improved and the danger of abscesses following inoculation seems to have been completely done away with.

[Extract from report of G. E. Nesom, director of agriculture, Aug. 8, 1908 (Report of Philippine Commission, 1908, pt. 2, p. 303).]

As in previous years, rinderpest has continued to be the most destructive infective animal disease existing in the islands. The situation has been greatly aggravated by the constant importation of infected cattle from Hongkong.

On account of the increase in the number of outbreaks over that of the previous year, it has been necessary to limit the inoculations almost entirely to herds actually infected.

During the year 6,933 cattle and 14,072 carabaos, or a total of 21,005, were inoculated with antirinderpest serum. Of these, only 621, or 2.95 per cent, are reported as having died.

The percentage of animals suffering from the disease at the time of inoculation has been very large, and the total number inoculated was nearly 5,000 head more than for the previous year.

The total amount of serum used in making these inoculations was 5,384 bottles of 300 cubic centimeters each.

The principal outbreaks of rinderpest have occurred in the Provinces of Batangas, Pampanga, Capiz, Antique, Negros, Occidental, and La Laguna. It has also appeared to less extent in most of the other Provinces.

In many cases the provincial and municipal officials have cooperated by establishing and policing systems of quarantine, and have otherwise given valuable aid in the work. This is necessary, as the bureau of agriculture has no means for employing a force sufficiently large to do this work throughout the islands. Besides, to do so would be a violation of the spirit of the local self-government system in general operation throughout the Provinces.

## BUREAU OF AGRICULTURE.

[Extract from report of Dean C. Worcester, secretary of the interior, Oct. 20, 1909 (Report of the Philippine Commission, pp. 118-119).]

*Suppression of animal diseases.*—Beyond doubt the most important work of the bureau of agriculture during the past year has been that for the combating of dangerous communicable diseases of domestic animals. In my last annual report the fact was mentioned that the tide of public sentiment had turned in the matter of inoculation against rinderpest, and that the demands for serum and veterinarians were consequently far in excess of the available supply. Every effort has been made during the year to meet the difficulty thus created.

The completion of the serum laboratory and of the large new stables at the Alabang stock farm, and the provision of increased facilities for the manufacture of serum at the bureau of science, have resulted in quadrupling the output of antirinderpest serum. All the veterinarians who could be secured at the salaries authorized by law for our service were brought to the islands. The director of agriculture was instructed that he must meet all demands for assistance, so far as the men and serum at his disposal would allow, and must, if necessary, cut other work, no matter how important, in order to keep the necessary funds available. These instructions were reiterated toward the end of the year when the insufficiency of the funds available for the general work of the bureau of agriculture was becoming painfully evident. The only limit which I allowed to be placed upon the work of saving cattle and carabaos was that imposed by the total amount of the appropriation for the bureau. The director of agriculture was warned that he must not incur a deficit, as there was no way in which it could be made good, but when toward the end of the year such a course became necessary in order to avoid a deficit, and after all other means of making economies had been exhausted, veterinarians were necessarily ordered to discontinue traveling except in meeting a few of the most threatening outbreaks.

Immediately after the passage of the annual appropriation bill the situation was saved by the Acting Governor General, who made 20,000 pesos immediately available for continuing the work. Although the increase in the veterinarian force and in the amount of serum available has made possible the obtaining of better results than during any previous year, I am not of the opinion that the best possible results were obtained for the money expended.

In at least one instance a serious epidemic, involving the loss of some 4,000 head of carabaos, occurred when, in my opinion, it might perfectly well have been prevented and would have been prevented by the employment of better administrative methods. After full examination into the causes of this disaster, I deemed a thorough reorganization of the service necessary, and declined to allow the director of agriculture to go on leave until the necessary changes in personnel and in the duties of officers and employees had been effected. It is too soon to state whether these changes will produce the desired result.

Toward the close of the year the serum was allowed to fall off in immunizing power. For this I can find no excuse except the absolute lack of funds with which to pay for experimental animals. Under the provisions of the last appropriation bill, which gave to secretaries of departments and to the governor general certain powers relative to the transfer of funds from one appropriation to another, which had not heretofore been possessed by these officers, such a situation will be impossible in the future.

The outbreak above referred to, which occurred on the island of Siquijor, was by far the most serious one of the year. Another, which occurred in the Cagayan Valley of northern Luzon, was for a time very threatening, but was ultimately checked after a long and stubborn fight. A very large number of minor outbreaks were promptly stamped out. Others were not attacked until they had attained considerable dimensions, owing to transportation difficulties and to the continued lack of sufficient veterinarians and serum, but were ultimately more or less effectively dealt with. On the whole, it can be said that, in spite of many minor and some very important defects, the service of the veterinary division of the bureau of agriculture in the suppression of rinderpest has been decidedly more satisfactory than ever before, and has resulted during the year in preventing enormous losses to the owners of cattle and carabaos in the Philippine Islands.

It is confidently anticipated that further progress will be made during the coming year. Additional veterinarians have been authorized and the serum

output will be augmented as rapidly as possible, but it should be remembered that veterinarians after arrival must of necessity spend a large amount of time in becoming familiar with the language and with the peculiarities and prejudices of the people; must gain experience in dealing with rinderpest, which they almost invariably lack; and must learn to travel rapidly and economically before they reach anything like their highest efficiency; while the presence of wild deer which become infected with rinderpest, and of course can not be quarantined, the general indisposition of the Filipino people to protect themselves or their neighbors by the imposition of any local quarantine measures other than those put into effect by the director of agriculture, and other serious obstacles combined, prevent, and will for a time continue to prevent, the achievement of the immediate and complete success in the eradication of rinderpest, which, under more favorable circumstances, might be obtainable.

During the year 22,285 carabaos and 6,469 cattle were inoculated against rinderpest, while 3,322 carabaos and 312 cattle were reinoculated. Only 639 carabaos and 153 cattle are known to have died after inoculation. This, too, in spite of the fact that many of the animals inoculated were badly diseased at the time the serum was administered, and of the further fact that the immunizing power of the serum was allowed to fall off materially toward the close of the year.

[Extract from report of Newton W. Gilbert, secretary of public instruction, Oct. 1, 1910 (Report of the Philippine Commission, 1910, pp. 183-184).]

During the year the efforts of the bureau have been concentrated chiefly upon the fight against animal disease, and at its close the situation showed no little improvement. Fifteen Provinces and 204 municipalities were at one time or another during the year reported as having been freed from rinderpest. In many instances, however, the freedom lasted only a few days, the disease again making its appearance and, upon its extermination, the Province or municipality being again reported clean. It will be seen, therefore, that these figures contain no few duplications. At the close of the year rinderpest was reported in 12 Provinces and 25 municipalities, and unfortunately these are scattered throughout the archipelago, so that the infection is still widespread. The most serious outbreaks occurred in Batangas and Occidental Negros, and the most gratifying work of the year was done in the former Province, where the disease now seems to have been almost entirely eradicated. If it were possible properly to quarantine this Province, there would be little likelihood of another serious outbreak. Conditions in Occidental Negros have also been much improved. With the increase in the price of sugar and the consequent cultivation of a large amount of land which had heretofore been lying fallow, large numbers of animals have been imported into this Province and it is of great importance that rinderpest should not be permitted to get beyond our control there. During the year more than 10,000 animals were reported as suffering with rinderpest and almost 8,000 as having died. Some 63,000 inoculations of antirinderpest serum were made.

The veterinary corps has been increased. On July 1, 1909, 21 veterinarians were on duty. During the year 4 resigned and 1 visited the United States on leave, while 25 new appointees arrived and entered upon their duties, making an average of 39 veterinarians on duty throughout the year. In addition, 8 agricultural inspectors and 6 American and 56 Filipino inoculators were engaged in the work. It has been found difficult to secure skilled veterinarians; the salaries which we are able to pay are not sufficiently large to attract considerable numbers of these men in the United States, and unfortunately among the Filipinos there are no veterinarians. The College of Veterinary Science was opened this year with a view to training Filipinos for this work. The enrollment, however, is, as has been said, very small.

Ten thousand one hundred and forty-five liters of antirinderpest serum were produced during the year, a much larger amount than we obtained in any former year. The production for July, 1909, was 507 and for June, 1910, 1,417 liters. The serum herd was increased from 154 to 524. The percentage of serum obtained from fresh blood for the past four years is as follows: Twenty-two and seven-tenths per cent, 28.6 per cent, 38.38 per cent, 40.28 per cent—a steady increase, which may be attributed to the experience of our laboratory workers and to improved methods and facilities in handling the product.

One of the chief difficulties in the way of the complete eradication of animal disease is the indifference, amounting at times to active opposition, of people

and officials to the work. I think the general temper is greatly improved, however, and the improvement will continue as the importance of the work and the sincerity of the government become more generally understood. Valuable assistance in this respect has been given by the Governor General, who has, by suspension or removal from office, awakened several apathetic officials to a full realization of their duty.

To the suppression of an outbreak of disease an effective quarantine is essential. In this work the municipal police have proved quite inefficient, and in so far as has been possible they have been replaced by detachments from the constabulary. The services of the latter have been most satisfactory, but decreased appropriations for that organization have led to a reduction in its forces, and we are unable to obtain these men in anything like sufficient numbers. If the bureau of agriculture is to do effective work in suppressing animal disease, it must be able to call in the services of the constabulary to a far larger extent than has ever before been possible.

[Extract from report of Gov. Gen. W. Cameron Forbes, Nov. 7, 1911 (Report of the Philippine Commission, 1911, p. 20).]

At the beginning of the last fiscal year, after 10 years of continuous effort to control rinderpest, more than half the Provinces were still infected and no noticeable gain had been made. In view of these facts a complete change in the system was made, the use of the rinderpest serum was discontinued, the desultory work throughout the Provinces was made a secondary part of the work, and a large number of employees of the bureau of agriculture were concentrated in the Province of Pangasinan. Maj. Gen. J. Franklin Bell, commanding the Philippine Division of the United States Army, by detailing over 1,200 Philippine Scouts to maintain a quarantine between Pangasinan and the adjoining Provinces, made possible the success of the scheme which depended on cleaning one particular part of the infected territory, keeping this part free from reinfection, and gradually pushing the line of clean territory farther and farther. Starting from the eastern part of Pangasinan, practically the whole Province has been cleaned by this system, and a similar successful campaign has been carried on in the island of Siquijor, which is now entirely free from rinderpest. The intention is to go over the whole country by this method, and, it is hoped, within a few years to rid the entire archipelago of this disease.

[Extract from report of W. Cameron Forbes, acting secretary of public instruction, Nov. 6, 1911 (Report of the Philippine Commission, 1911, pp. 170-171).]

During the past year the chief efforts of the bureau have been given to the rinderpest campaign—about 50 per cent of the entire funds of the bureau devoted to this purpose and the veterinary corps largely increased. At the beginning of the fiscal year 1911 there were on duty 41 veterinarians, 6 American live-stock inspectors, and 56 Filipino live-stock inspectors. On June 30, 1911, there were 47 veterinarians, 1 veterinary pathologist, 1 veterinary entomologist, 56 American live-stock inspectors, and approximately 300 Filipino live-stock inspectors.

The following quotation gives an idea of the rinderpest situation in the fiscal year 1910:

“Fifteen Provinces and 204 municipalities were at one time or another during the year reported as having been freed from rinderpest. In many instances, however, the freedom lasted only a few days, the disease again making its appearance, and upon its extermination the Province or municipality being again reported clean.”

After some years of scattered work of this sort, it became evident that no great advance was being made and that some change in method was necessary. In July, 1910, Dr. A. R. Ward, of the University of California, was appointed chief veterinarian and undertook the organization of a systematic campaign against the rinderpest. After exhaustive investigation the conclusion was reached that under the conditions existing in the Philippines, the use of anti-rinderpest serum was impracticable, and it was discontinued. Following the discontinuance of the use of serum, the effort to control rinderpest was centered upon the object of keeping animals separated from one another and upon detecting the diseased animals, so that they might be placed under restraint in corrals. It also became evident that with the forces available it was impossible to combat the rinderpest in all parts of the islands at the same time. It was, therefore, decided to concentrate the total available force of the bureau of agriculture in the Province of Pangasinan, and to call on the constabulary and

scouts for any aid which they could give in maintaining the necessary quarantine. Maj. Gen. J. Franklin Bell, commanding the Philippine Division of the United States Army, appreciating its importance, made possible the work which has so far been done by assigning 1,200 scouts, 41 cavalrymen, and 5 veterinarians for duty with the bureau of agriculture. Owing to the enthusiasm and fine discipline of this force, the bureau of agriculture has been able to maintain an effective quarantine over a large part of the Province of Pangasinan, and has gradually succeeded in wiping out rinderpest from the entire eastern portion of the Province and as far west as Lingayan. A similar campaign was inaugurated in the island of Siquijor, which also has resulted successfully. The difficulty, however, remains that in this country, which is entirely unfenced, if the strict quarantine, which can only be maintained by a military force, is withdrawn, a single infected animal may enter clean territory and reinfect the entire district, leaving the whole work to be done again. Another great difficulty encountered in the effort to suppress rinderpest is the fact that, in spite of its destructive history of hundreds of years, the cause of the malady, the methods by which it is carried, the period at which it is most infective, and the duration of the period of infectivity are still questions to be definitely determined. In order to get some light on these problems the serum laboratory at Alabang was converted into a research laboratory, and the results obtained, which so far have been largely at variance with the principles formerly followed in the Philippine Islands, have been very successfully applied to the work in the field. It was shown from experiments conducted at Alabang that the sick animals cease to be dangerous to others shortly after the diagnostic symptoms are fully developed, and that the most infective period of the disease is in its early stages when the symptoms can not be recognized. As it was impossible, under the conditions prevailing in this country, to determine what animals had been in contact with the diseased animal, in order to slaughter them as well as the sick animal, the system of slaughtering, which has been successful in other countries, was, after a short trial, abandoned as impracticable.

Rinderpest has shown a tendency to spread extensively during the year, especially from central Luzon south toward Manila, in the islands of Leyte, Cebu, and Siquijor, and in the Provinces of Oriental Negros, Surigao, Cagayan, and Isabela. The total number of municipalities infected at the close of the year was 81, as compared to 25 reported at the close of the previous year; but owing to the more effective methods employed for detecting and reporting disease at the end than at the beginning of the fiscal year, it is impossible to judge anything from these figures. However, with the knowledge which has been gained from the experimental work and with the system and effective fighting force which are being daily improved, as a result of experience, it is honed little by little to eradicate this worst of cattle diseases from the Philippine Islands.

[Extract from report of Newton W. Gilbert, Acting Governor General, Oct. 1, 1912 (Report of the Philippine Commission, 1912, pp. 25-26).]

The rinderpest situation has improved and the quarantine policy inaugurated by the bureau of agriculture has been consistently followed throughout the year. After due consideration it had been decided by the officials in charge that only by means of concentrated quarantine could the rinderpest situation be relieved. By concentrated quarantine is meant a port quarantine to prevent the disease entering the islands from outside and a local quarantine of infected districts until the disease is eradicated. This system involves some hardship on the people and to a certain extent cripples agriculture and commerce by preventing the free movement of animals between the Provinces. The government has endeavored to get the cooperation of the municipal and provincial governments and of the farmers and has succeeded to a large extent. With the aid of the scouts, placed at the disposal of the government by the commanding general, strict quarantines have been maintained in the infected districts. A quarantine fence has been established between the hills and the coast, cutting off from the south the Provinces north of Pangasinan. Pangasinan has been cleaned and the quarantine has slowly fought its way south through the Provinces of Nueva Ecija, Tarlac, Pampanga, and Bulacan. That a measure of success has been achieved is proved by the figures which show a reduction of 47 per cent in the number of municipalities infected, from 64 to 34. The number of reported deaths of carabao and cattle from rinderpest for the year was approximately 3,000, or one-quarter of 1 per cent of all the animals, while in 1902, 625,000 deaths, or about 43 per cent of the animals existing in the

islands, were reported. A quarantine against Indo-China and Hongkong has been maintained throughout the year. Practically every time a shipment was allowed in the islands infection resulted. Cattle from Indo-China and Hongkong can now be landed only at Manila, after a three months' quarantine. This measure has been deemed necessary in spite of the constant protests of cattle importers. It is thought that the protection of over 1,000,000 animals now in the islands is of greater importance than further importations.

[Extract from report of Newton W. Gilbert, secretary of public instruction, Oct. 11, 1912 (Report of the Philippine Commission, 1912, pp. 239-240).]

*Rinderpest.*—Animal disease is now a comparatively small factor in the industrial economy of the islands, but potentially it is a very large factor. During the year only 4,312 new cases of rinderpest were reported among the cattle and carabao, with 2,847 deaths. The census of 1903 states that during the year 1902, 629,176 cattle and carabao died of disease, chiefly rinderpest. The following table shows the known amount of infection at the beginning and end of the year:

Week ending—	New case per week.	Deaths per week.	Province infected.	Municipalities infected.	Barrios infected.
July 1, 1911.....	254	230	17	64	170
June 29, 1912.....	23	19	11	34	69

<sup>1</sup> Cattle and carabao.

The comparatively small number of deaths from rinderpest has retarded but little the rapid increase in the herds of carabao and cattle. The percentage of deaths from this source compared to births is almost negligible. This does not mean, however, that our work has ended. If the efforts of the government were to any considerable extent relaxed and the disease allowed to spread, whole Provinces would again be swept clean of their work animals. The existence of disease also hinders capitalists from investing large sums in cattle raising in the Philippines, and the chief work of the bureau will not be ended until rinderpest has been completely eradicated from the islands and all sources of outside infection eliminated.

The method followed in combating the disease was the same as last year—that is, through strict quarantine—and the satisfactory results seem to justify the belief that this is the only feasible method for making headway against rinderpest. Effective quarantines have been possible through the cooperation of the military authorities. The division commander, Maj. Gen. J. Franklin Bell, has placed at the disposal of the government a large number of scouts, who have rendered valuable service. On the last day of the year there were on duty in this work 30 officers and 1,390 enlisted men, belonging to 13 companies of the Fifth, Seventh, and Ninth Battalions of the Philippine Scouts. Not only have the men given splendid service, but their officers have shown enthusiasm, patience, and tact in discharging duties which were often disagreeable, and their cooperation could not have been fuller had they been an integral part of the organization of the bureau of agriculture. Provincial officials and, to a considerable extent, the people in general are coming to appreciate the necessity of quarantines and are cooperating in a measure which makes effective work easier as the campaign progresses.

The following table shows the extent to which disease was prevalent during the last eight days of the year:

	Suspects.		New cases.		Convalescents.		Deaths.	
	Cattle.	Carabao.	Cattle.	Carabao.	Cattle.	Carabao.	Cattle.	Carabao.
Pangasinan.....		5		6		5		1
Zambales.....		5		2		4		2
Pampanga.....		6		9		3		5
Rizal.....		9		5		7		2
Laguna.....		3		2		13		2
Capiz.....				1		4		1
Iloilo.....		3		3		4		7
Total.....		31		28		56		20

It is only fair to state that this table is not conclusive. There is, without doubt, some unreported disease, particularly in the northern part of Luzon. From time to time territory adjacent to the foothills of Benguet is infected by animals coming from the north, although every effort is being made to prevent their introduction from this territory until the bureau has had an opportunity to move its force into northern Luzon and stamp out such disease as exists there.

[Extract from report of Newton W. Gilbert, Acting Governor General, Sept. 25, 1913 (Report of the Philippine Commission, 1913, p. 23).]

The campaign against animal diseases, of which the most menacing is rinderpest, has been steadily pushed during the year. At the end 8 Provinces, with 24 municipalities, were known to be infected, a smaller number than at the end of the preceding year, though slightly larger than at one time in the course of the 12 months. Altogether 4,731 cases were reported, with 2,787 deaths, an increase of 419 cases but a decrease of 60 deaths, as compared with the preceding year; the number of both cases and deaths was largest in the third quarter. On the whole, therefore, the situation is not materially changed, although it is, of course, in every way a vast improvement on that of a few years ago. Strict quarantine of infected districts has continued to prove the most effective means of dealing with the problem. At the close of the year a total of 90 officers and enlisted men of the constabulary and 901 of the Philippine Scouts were on duty assisting in the campaign. Their work has been done in an extremely creditable manner. Experience with the introduction of the disease by cattle shipped from foreign ports has proved so unfortunate that quarantines on such shipments, of varying duration and degrees of strictness, have been very generally maintained, and the imports have fallen off materially.

#### VETERINARY DIVISION.

[Extract from report of Newton W. Gilbert, secretary of public instruction, Sept. 23, 1913 (Report of Philippine Commission, 1913, p. 257).]

During the year the staff of this division has been decreased by 4 veterinarians and 17 American live-stock inspectors, and increased by 14 Filipino inspectors. At the beginning of the year rinderpest was prevalent both in the Visayas and on the island of Luzon. Eleven Provinces were known to have infection in 35 municipalities. Infection was known to exist in the Provinces of Surigao, Capiz, and Iloilo, while on Luzon the disease was confined, so far as was known, to the Provinces of Bulacan, Isabela, Laguna, Mountain, Pampanga, Pangasinan, Rizal, and Zambales. Of these, Bulacan, Capiz, Iloilo, Laguna, Mountain, Rizal, and Surigao were cleaned during the year, but to offset this, the Provinces of Cagayan, Ilocos Norte, Ilocos Sur, and La Union were known to be infected on June 30, 1913. During the year 4,731 cases of rinderpest, with 2,787 deaths, were reported. Seventy-two per cent of the new cases and 70 per cent of the deaths occurred in three Provinces, namely Pampanga, 1,785 new cases and 1,335 deaths; Zambales, 1,212 cases and 449 deaths; and La Union, 438 cases and 184 deaths. At the time of the greatest scourge of the disease in these three Provinces, there was not the degree of cooperation between the bureau of agriculture and the local officials which is necessary to combat it successfully. It is believed that this condition has been remedied in all these Provinces. In Zambales and La Union, in fact, the disease is almost wiped out.

#### APPENDIX C.

##### PROPOSED ACT.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That when any citizen of the United States employed by the Philippine government shall have had ten or more years of continuous, actual, and satisfactory service he may, upon making application to the Governor General of the Philippine Islands, be retired from active service, and when so retired he shall receive for a period equal to the number of years of such satisfactory service an annual compensation equal to two and one-half*

per centum for each year's active service rendered by him, of the average current pay received annually by him during said period of active service: *Provided*, That the terms of this act shall apply only to employees receiving for ten or more years at the time of retirement an annual salary of not less than six thousand pesos, or a total salary during his service equivalent thereto: *And provided further*, That the payments required under this act shall be made from the treasury of the Philippine Islands or from the Province or municipality paying the salary of the employee at the time of his retirement from the service.

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## APPENDIX D.

### THE GOVERNMENT OF THE PHILIPPINE ISLANDS, EXECUTIVE BUREAU.

COMMITTEE FOR INVESTIGATING THE CONDUCT OF BUSINESS IN THE BUREAUS AND OFFICES OF THE PHILIPPINE GOVERNMENT.

EXECUTIVE ORDER }  
No. 52. }

MANILA, July 10, 1913.

Charles H. Sleeper, director of lands; William T. Nolting, collector of internal revenue; John S. Leech, director of printing; and Clifford H. French, assistant auditor, are hereby appointed a committee for the purpose of investigating the conduct of the business of the various bureaus and offices in the insular government and making report and recommendations on the following points:

1. Any work which was performed by any bureau which was, in their judgment, unnecessary.
2. Duplication of work.
3. Administrative economies, including the more rapid Filipinization of the service where advisable.

The committee will take as a basis the report of the organization committee appointed by Executive Order No. 14, series of 1905, will see how far the recommendations of that committee are now being carried out, and will study further the report of that committee and amend the same if, in their judgment, experience has proved the recommendations of said report faulty in any particular.

All directors and officers of bureaus are directed to assist the committee in any way, give them such information and data as they may require, and such clerical help as may be needed in the conduct of their business.

Whenever the committee is engaged in examining the bureau of which any member is chief, such member shall disassociate himself from the committee during the period of the examination of his own bureau.

The reduction of customs revenues, past and prospective, and the proposed abolition of all export duties rendered necessary a reduction of the current expenses of the government.

It is believed that all bureaus will benefit if they may have an opportunity of taking advantage of improved methods of other bureaus and thus standardizing what is best in the service.

W. CAMERON FORBES,  
*Governor General.*

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## APPENDIX D.

[Extracts from annual reports of Hon. Newton W. Gilbert, Acting Governor General of the Philippines, 1912, 1913.]

From report of 1912:

At the end of the long dry season great swarms of locusts appeared, especially in the southern islands. The locust question having been brought to the consideration of the legislature by the Governor General, act No. 2121 was passed providing means for combatting this pest by the appointment of provincial locust boards, by making an appropriation for the fight, and by placing the general management and leadership of it in the hands of the director of agriculture. Provinces requesting assistance from the general government have been furnished funds, and it is believed that the fight has been more successful



than in previous years. It is the opinion of the undersigned that the plague of locusts can never successfully be handled until methods are found of exterminating the locusts in their breeding places.

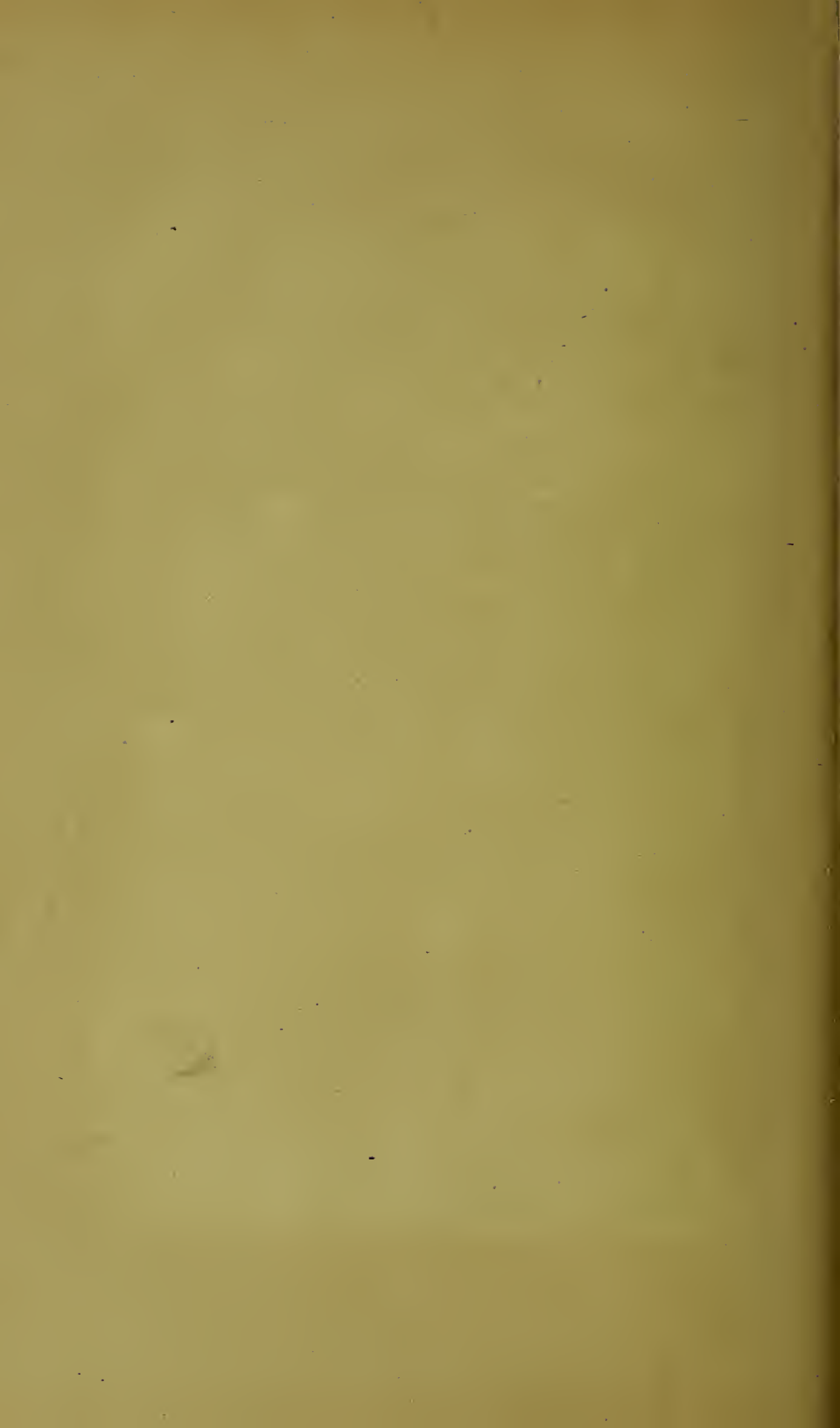
From report of 1913:

During the last quarter of the year very severe outbreaks of locusts appeared in eastern and southern Luzon, and at its close 33 out of the 38 Provinces were more or less infested. The work of destruction in the cultivated areas has been pushed to the utmost and has always, within any given place and time, been carried to success, but in some Provinces the condition is so widespread that it must necessarily be a question of months, if not years, before the uncultivated tracts are completely cleared of the breeding swarms which there persist and resist all regular measures of control. There has been on the whole an increasing degree of cooperation on the part of the local authorities and the people in the necessary work, though it sometimes imposes appreciable inconvenience or even hardship on the latter. The experiments with bacilli parasitic in the migratory locusts, while very successful in the laboratory, have not so far proved of much practicable value in the field. It is hoped that further research will result in the discovery of a really effective remedy.











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